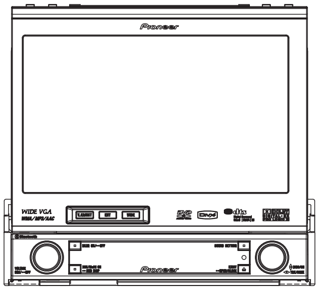
Pioneer sound.vision.soul

Service Manual


AVH-P7950DVD/RC

ORDER NO.
CRT3942

DVD AV RECEIVER

AVH-P7950DVD/RC
AVH-P7950DVD/RD
AVH-P7950DVD/RI
AVH-P7950DVD/CN5

This service manual should be used together with the following manual(s):

Model No.	Order No.	Mech.Module	Remarks
CX-3212	CRT3896	MS5	DVD Mech. Module : Circuit Descriptions, Mech. Descriptions, Disassembly

"Dolby", "Pro Logic", and the double-D symbol are trademarks of Dolby Laboratories. "DTS" and "DTS-ES | Neo:6" are registered trademarks of DTS, Inc. "96/24" is a trademark of DTS, Inc.

For details, refer to "Important Check Points for Good Servicing".

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SAFETY INFORMATION

CAUTION

This service manual is intended for qualified service technicians; it is not meant for the casual do-it-yourselfer.
Qualified technicians have the necessary test equipment and tools, and have been trained to properly and safely repair complex products such as those covered by this manual.
Improperly performed repairs can adversely affect the safety and reliability of the product and may void the warranty.
If you are not qualified to perform the repair of this product properly and safely, you should not risk trying to do so and refer the repair to a qualified service technician.

1. Safety Precautions for those who Service this Unit.

- **Follow the adjustment steps in the service manual when servicing this unit. When checking or adjusting the emitting power of the laser diode exercise caution in order to get safe, reliable results.**

Caution:

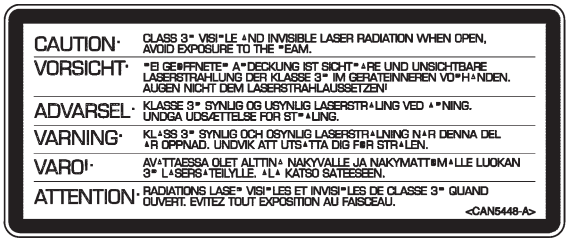
1. **During repair or tests, minimum distance of 13cm from the focus lens must be kept.**
2. **During repair or tests, do not view laser beam for 10 seconds or longer.**

2. The trianglar label is attached to the mechanism unit frame.

CAUTION
This product contains a laser diode of higher class than 1. To ensure continued safety, do not remove any covers or attempt to gain access to the inside of the product.
Refer all servicing to qualified personnel.

The following caution label appears on your unit.

On the top of the player.



CAUTION: CLASS 3B VISIBLE AND INVISIBLE LASER RADIATION WHEN OPEN, AVOID EXPOSURE TO THE BEAM.

VORSICHT: BEI GEÖFFNETER ABDECKUNG IST SICHTBARE UND UNSICHTBARE LASERSTRAHLUNG DER KLASSE 3B IM GERATEINNEREN VORHANDEN. AUGEN NICHT DEM LASERSTRAHLAUSSETZEN!

ADVARSEL: KLASSE 3B SYNLIG OG USYNLIG LASERSTRÅLING VED ÅBNING. UNDGA UDSÆTTELSE FOR STRÅLING.

VARNING: KLASS 3B SYNLIG OCH OSYNLIG LASERSTRÅLNING NÄR DENNA DEL ÄR OPPNAD. UNDVIK ATT UTSÄTTA DIG FÖR STRÅLEN.

VARO!: AVATTAESSA OLET ALTTINA NAKYVALLE JA NAKYMATTÖMÄLLE LUOKAN 3B LASERSÄTEILYLLE. ÄLÄ KATSO SATEESEEN.

ATTENTION: RADIATIONS LASER VISIBLES ET INVISIBLES DE CLASSE 3B QUAND OUVERT. EVITEZ TOUT EXPOSITION AU FAISCEAU.

<CAN5448-A>

WARNING!

The AEL (accessible emission level)of the laser power output is less than CLASS 1 but the laser component is capable of emitting radiation exceeding the limit for CLASS 1.
A specially instructed person should do servicing operation of the apparatus.

Laser diode characteristics
Wave length:
DVD:660 nm to 670 nm
CD:780 nm to 800 nm
Maximum output:
DVD : 1.27 mW(Emitting period :9 sec.)
CD : 6.26 mW(Emitting period : unlimited)

Additional Laser Caution

Transistors Q1103 and Q1104 in PCB drive the laser diodes for DVD and CD respectively. When Q1103 or Q1104 is shorted between their terminals, the laser diodes for DVD or CD will radiate beam. If the top cover is removed with no disc loaded while such short-circuit is continued, the naked eyes may be exposed to the laser beam.

CAUTION

Danger of explosion if battery is incorrectly replaced.
Replaced only with the same or equivalent type recommended by the manufacture.
Discord used batteries according to the manufacture's instructions.

[Important Check Points for Good Servicing]

In this manual, procedures that must be performed during repairs are marked with the below symbol.
Please be sure to confirm and follow these procedures.

1. Product safety

Please conform to product regulations (such as safety and radiation regulations), and maintain a safe servicing environment by following the safety instructions described in this manual.

① Use specified parts for repair.

Use genuine parts. Be sure to use important parts for safety.

② Do not perform modifications without proper instructions.

Please follow the specified safety methods when modification(addition/change of parts) is required due to interferences such as radio/TV interference and foreign noise.

③ Make sure the soldering of repaired locations is properly performed.

When you solder while repairing, please be sure that there are no cold solder and other debris.
Soldering should be finished with the proper quantity. (Refer to the example)

④ Make sure the screws are tightly fastened.

Please be sure that all screws are fastened, and that there are no loose screws.

⑤ Make sure each connectors are correctly inserted.

Please be sure that all connectors are inserted, and that there are no imperfect insertion.

⑥ Make sure the wiring cables are set to their original state.

Please replace the wiring and cables to the original state after repairs.
In addition, be sure that there are no pinched wires, etc.

⑦ Make sure screws and soldering scraps do not remain inside the product.

Please check that neither solder debris nor screws remain inside the product.

⑧ There should be no semi-broken wires, scratches, melting, etc. on the coating of the power cord.

Damaged power cords may lead to fire accidents, so please be sure that there are no damages.
If you find a damaged power cord, please exchange it with a suitable one.

⑨ There should be no spark traces or similar marks on the power plug.

When spark traces or similar marks are found on the power supply plug, please check the connection and advise on secure connections and suitable usage. Please exchange the power cord if necessary.

⑩ Safe environment should be secured during servicing.

When you perform repairs, please pay attention to static electricity, furniture, household articles, etc. in order to prevent injuries.
Please pay attention to your surroundings and repair safely.

2. Adjustments

To keep the original performance of the products, optimum adjustments and confirmation of characteristics within specification.
Adjustments should be performed in accordance with the procedures/instructions described in this manual.

3. Lubricants, Glues, and Replacement parts

Use grease and adhesives that are equal to the specified substance.
Make sure the proper amount is applied.

4. Cleaning

For parts that require cleaning, such as optical pickups, tape deck heads, lenses and mirrors used in projection monitors, proper cleaning should be performed to restore their performances.

5. Shipping mode and Shipping screws

To protect products from damages or failures during transit, the shipping mode should be set or the shipping screws should be installed before shipment. Please be sure to follow this method especially if it is specified in this manual.

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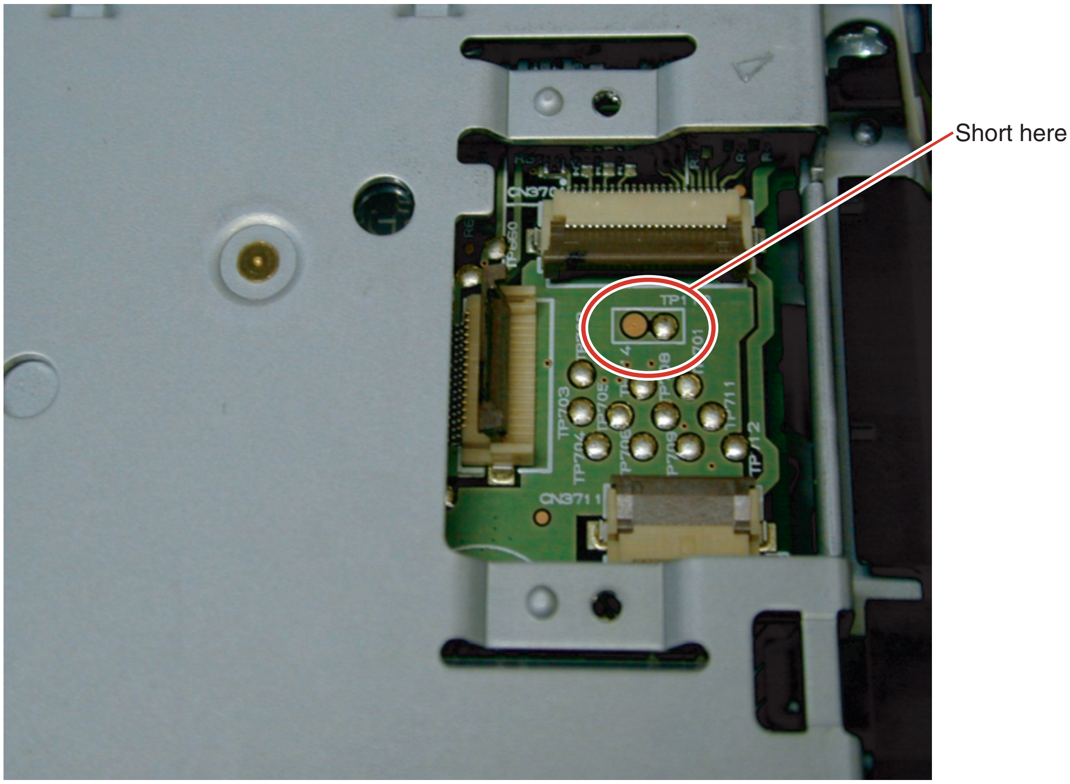
1. SERVICE PRECAUTIONS

1. You should conform to the regulations governing the product (safety, radio and noise, and other regulations), and should keep the safety during servicing by following the safety instructions described in this manual.

DVD MECHANISM MODULE section precaution

1. Before disassembling the unit, be sure to turn off the power. Unplugging and plugging the connectors during power-on mode may damage the ICs inside the unit.
2. To protect the pickup unit from electrostatic discharge during servicing, take an appropriate treatment (shorting-solder) by referring to "the DISASSEMBLY" .
3. After replacing the pickup unit, be sure to skew adjustment.
4. During disassembly, be sure to turn the power off since an internal IC might be destroyed when a connector is plugged or unplugged.

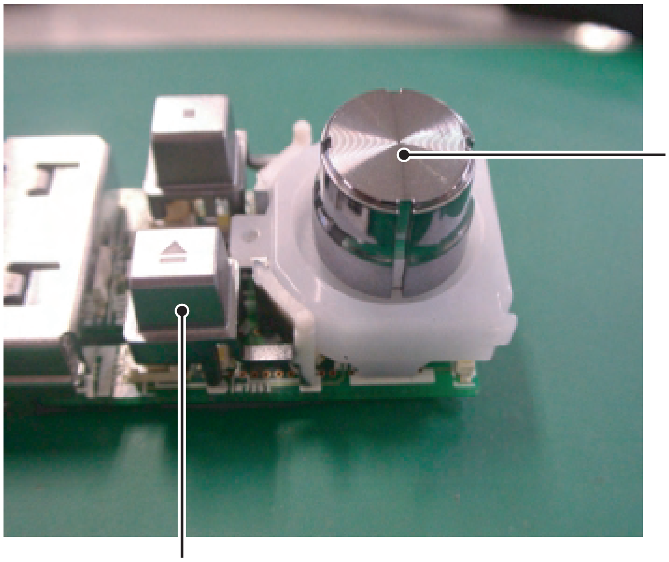
H/U independent operation



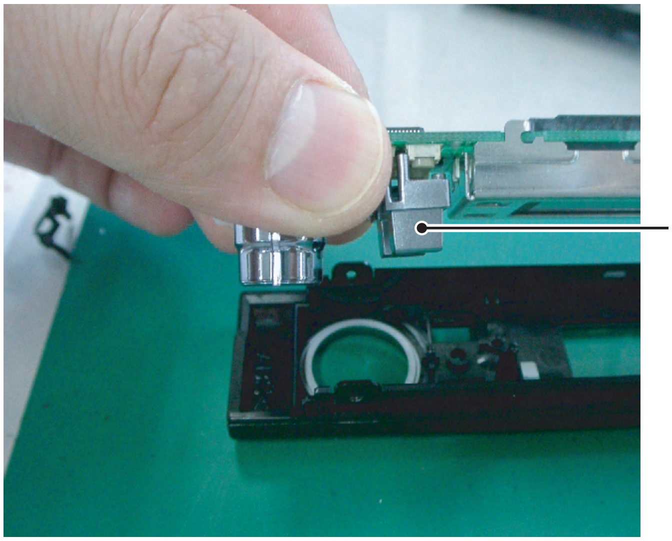
Operation becomes possible even if there is no H/A, when it does in this way.
Since TUN is not connected, TUN sauce does not operate.
Please operate sauce by DVD, AUX, etc.

Note) Button unit (CXC8061) is a non-reusable part. When repairing a PCB, repair without removing the button unit. In case the button unit must be removed, do not reuse the removed button unit and use a new one.

For this product, the button unit, CXC8061, is designated as a non-reusable part because the hook part will come off once the part is removed from the device.
When repairing the grille, repair without removing CXC8061.
A special technique will be required to install the PCB into the grille with CXC8061 mounted.
As shown in the picture below, assemble CAI1317 with the PCB beforehand. And insert the PCB into the grille by holding CAI1317 and CXC8061 so that they will not drop off.



Assemble CAI1317 beforehand as shown in the picture.



Insert into the grille while holding the parts.

NOTES ON SOLDERING

- For environmental protection, lead-free solder is used on the printed circuit boards mounted in this unit.
  Be sure to use lead-free solder and a soldering iron that can meet specifications for use with lead-free solders for repairs accompanied by reworking of soldering.

- Compared with conventional eutectic solders, lead-free solders have higher melting points, by approximately 40 ºC.
  Therefore, for lead-free soldering, the tip temperature of a soldering iron must be set to around 373 ºC in general, although
  the temperature depends on the heat capacity of the PC board on which reworking is required and the weight of the tip of the soldering iron.

Compared with eutectic solders, lead-free solders have higher bond strengths but slower wetting times and higher melting temperatures (hard to melt/easy to harden).

The following lead-free solders are available as service parts:
- Parts numbers of lead-free solder:
  GYP1006 1.0 in dia.
  GYP1007 0.6 in dia.
  GYP1008 0.3 in dia.

2. SPECIFICATIONS

2.1 SPECIFICATIONS

General

Rated power source	14.4 V DC (allowable voltage range: 12.0 V to 14.4 V DC)
Grounding system	Negative type
Backup current	3.5 mA or less
Head unit:	
Max. current consumption	3.7 A
Dimensions (W × H × D):	
DIN	
Chassis	178 × 50 × 160 mm
Nose	188 × 58 × 36 mm
D	
Chassis	178 × 50 × 165 mm
Nose	170 × 46 × 31 mm
Weight	2.5 kg
Hideaway unit:	
Max. current consumption	21.5 A
Dimensions (W × H × D)	280 × 37 × 171 mm
Weight	1.4 kg

Display

Screen size/aspect ratio	7 inch wide/15:9 (effective display area: 152.4 × 91.44 mm)
Pixels	1 152 000 (800 × 480 × 3)
Type	TFT active matrix, transmissive type
Color system	NTSC/PAL/PAL-M/SECAM compatible
Storage temperature range	–20 °C to +80 °C
Angle adjustment	50° to 110° (initial settings: 90°)

Audio

Maximum power output	50 W × 8
Continuous power output	22 W × 8 (50 Hz to 15 000 Hz, 5% THD, 4 Ω load, both channels driven)
Load impedance	4 Ω to 8 Ω × 8
Preout max output level/output impedance	5.0 V/100 Ω
Decoder	Linear PCM, Dolby Digital, Dolby Digital EX, Dolby EX, Dolby Pro Logic II, DTS, DTS-CD, DTS-ES (matrix, discrete), DTS 96/24, DTS Neo:6, AAC

Sound setting

Position	Front left/Front right/Front/All/Off
Parametric equalizer (multi-channel mode):	
Band	3 band
Frequency	40/50/63/80/100/125/160/200/250/315/400/500/630/800/1k/1.25k/1.6k/2k/2.5k/3.15k/4k/5k/6.3k/8k/10k/12.5k Hz
Q Factor	1.2/3.6
Gain	±12dB (2 dB/step)
Graphic equalizer (2-channel mode):	
Band	13 band
Frequency	50/80/125/200/315/500/800/1.25k/2k/3.15k/5k/8k/12.5k Hz
Q Factor	5.0
Gain	±12dB (2 dB/step)
Speaker setting:	
Front	Large/Small
Front center	Large/Small/Off
Rear	Large/Small/Off
Rear center	Large/Small/Off
Subwoofer	On/Off
Time alignment	0 cm to 500 cm (2.5 cm/step)
Speaker level	–24 dB to +10 dB (1 dB/step)

Cut-off frequency

Front (L/R independent) (Standard mode):	
HPF:	
Frequency	50/63/80/100/125/160/200 Hz
Slope	–6/–12/–18 dB/oct
Mute	On/Off
Front (L/R independent) (Network mode):	
High HPF:	
Frequency	1.25/1.6/2/2.5/3.15/4/5/6.3/8/10/12.5 kHz
Slope	–6/–12 dB/oct
Phase	Normal/Reverse
Low LPF:	
Frequency	1.25/1.6/2/2.5/3.15/4/5/6.3/8/10/12.5 kHz
Slope	0 (Pass)/–6/–12 dB/oct
Low HPF:	
Frequency	50/63/80/100/125/160/200 Hz
Slope	–6/–12/–18 dB/oct
Mute	On/Off

Front center:
HPF:
Frequency .... 50/63/80/100/125/160/200 Hz
Slope .... –6/–12/–18 dB/oct
Mute .... On/Off

Rear (L/R independent):
HPF:
Frequency .... 50/63/80/100/125/160/200 Hz
Slope .... –6/–12/–18 dB/oct
Mute .... On/Off
Rear center:
HPF:
Frequency .... 50/63/80/100/125/160/200 Hz
Slope .... –6/–12/–18 dB/oct
Mute .... On/Off

Subwoofer:
LPF:
Frequency .... 50/63/80/100/125/160/200 Hz
Slope .... 0 (Pass)/–6/–12/–18 dB/oct
Phase .... Normal/Reverse
Mute .... On/Off

DVD Player

System .... DVD audio, DVD video, DVD-VR, Video CD, CD, WMA, MP3, AAC, DivX, JPEG system
Usable discs .... DVD audio, DVD video, Video CD, dtsCD, CD, CD-R/RW, DVD-R/RW

Region number:
for Middle East Asian and South African models
.... 2
for Southeast Asian models
.... 3
for South American and Oceanian models
.... 4
for CN5 model
.... 6

Signal format:
Sampling frequency ..... 16/22.05/24/44.1/48/88.2/96/176.4/192 kHz
Number of quantization bits
.... 16/20/24; linear
Frequency response .... 5 Hz to 96 000 Hz (with DVD, at sampling frequency 192 kHz)
Signal-to-noise ratio .... 102 dB (1 kHz) (IEC-A network)
(CD: 102 dB (1 kHz) (IEC-A network))

Dynamic range .... 100 dB (1 kHz)
(CD: 98 dB (1 kHz))
Distortion .... 0.008 % (1 kHz)
Output level:
Video .... 1.0 Vp-p/75 Ω (±0.2 V)
Audio .... 1.1 V (1 kHz, 0 dB)
Number of channels .... 2 (stereo), Digital 6 ch
MP3 decoding format .... MPEG-1 & 2 Audio Layer 3
WMA decoding format .... Ver. 7, 7.1, 8, 9, 10 (2ch audio)
(Windows Media Player)
AAC decoding format .... MPEG-4 AAC (iTunes® encoded only) (.m4a)
DivX decoding format .... Home Theater Ver. 3, 4, 5.2, 6 (.avi, .divx)

FM tuner

Frequency range .... 87.5 MHz to 108.0 MHz
Usable sensitivity .... 8 dBf (0.7 µV/75 Ω, mono, S/N: 30 dB)
Signal-to-noise ratio .... 75 dB (IEC-A network)
Distortion .... 0.3 % (at 65 dBf, 1 kHz, stereo)
0.1 % (at 65 dBf, 1 kHz, mono)
Frequency response .... 30 Hz to 15 000 Hz (±3 dB)
Stereo separation .... 45 dB (at 65 dBf, 1 kHz)

AM tuner

Frequency range .... 531 kHz to 1 602 kHz (9 kHz)
530 kHz to 1 640 kHz (10 kHz)
Usable sensitivity .... 18 µV (S/N: 20 dB)
Signal-to-noise ratio .... 65 dB (IEC-A network)

Infrared remote control

Wavelength .... 945 nm
Output .... typ; 10 mw/sr per Infrared LED

Note

Specifications and the design are subject to possible modifications without notice due to improvements. ■

2.2 DISC/CONTENT FORMAT

Playable discs

DVD, Video CD and CD discs that display the logos shown below can be played back on this player.

DVD audio

DVD AUDIO™

DVD video

DVD VIDEO™

Video CD

COMPACT disc DIGITAL VIDEO

CD

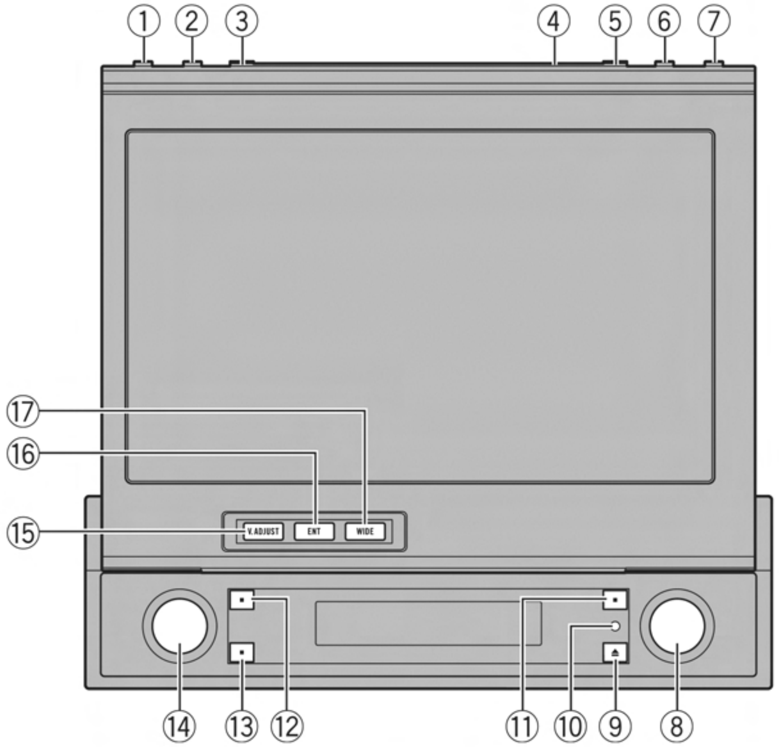
COMPACT disc DIGITAL AUDIO

COMPACT disc DIGITAL AUDIO TEXT

Notes

- DVD is a trademark of DVD Format/Logo Licensing Corporation.
- This player can only play back discs bearing the marks shown above.

2.3 PANEL FACILITIES



Head unit

① **DISPLAY button**
Press to turn the information display on or off when the video is displayed.

② **PGM button**
Press to operate the preprogrammed functions for each source.

③ **FLIP DOWN button**
Press to turn the LCD panel horizontal temporarily from upright position.

④ **Ambient light sensor**
Senses ambient light. This system automatically adjusts the brightness of the display to compensate for ambient light.

⑤ **OPEN/CLOSE button**
Press to open or close the LCD panel.

⑥ **BAND/ESC button**
Press to select among three FM bands and to cancel the control mode of functions.

⑦ **ATT button**
Press to quickly lower the volume level, by about 90%. Press once more to return to the original volume level.
Press and hold to switch the demonstration mode ON or OFF.

⑧ **Joystick**
Move to perform manual seek tuning, fast forward, reverse and track search controls. Also used for controlling functions.

⑨ **EJECT button**
Press to eject a disc from this unit.
Press and hold to open or close the front panel.

⑩ **RESET button**
Press to return to the factory settings (initial settings).

⑪ **SOUND SETTING button**
Press to select the sound setting.
Press and hold to switch the button illumination color.

⑫ **REAR ON button**
Press to switch between the video sources (such as **DVD** or **AV**) on rear display.

⑬ **2CH/Multi CH button**
Press to switch between the multi-channel output and 2-channel output.
Press and hold to switch between the displays on the sub-display.

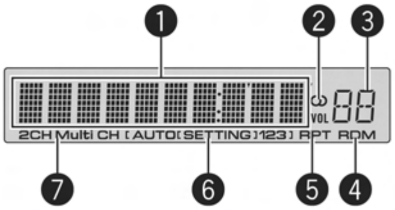
⑭ **SOURCE button, VOLUME**
This unit is turned on by selecting a source.
Press to cycle through all the available sources.
Press and hold to turn the unit off.
Rotate it to increase or decrease the volume.

⑮ **V.ADJUST button**
Press to display the picture adjustment menu.

⑯ **ENTERTAINMENT button**
Press to display the entertainment menu.

⑰ **WIDE button**
Press to select a desired mode for enlarging a 4:3 picture to a 16:9 one. ■

Sub-display



❶ **Source display**
Shows the status of selected source.

❷ **Stereo (◯◯) indicator**
Shows when the selected frequency is being broadcast in stereo.

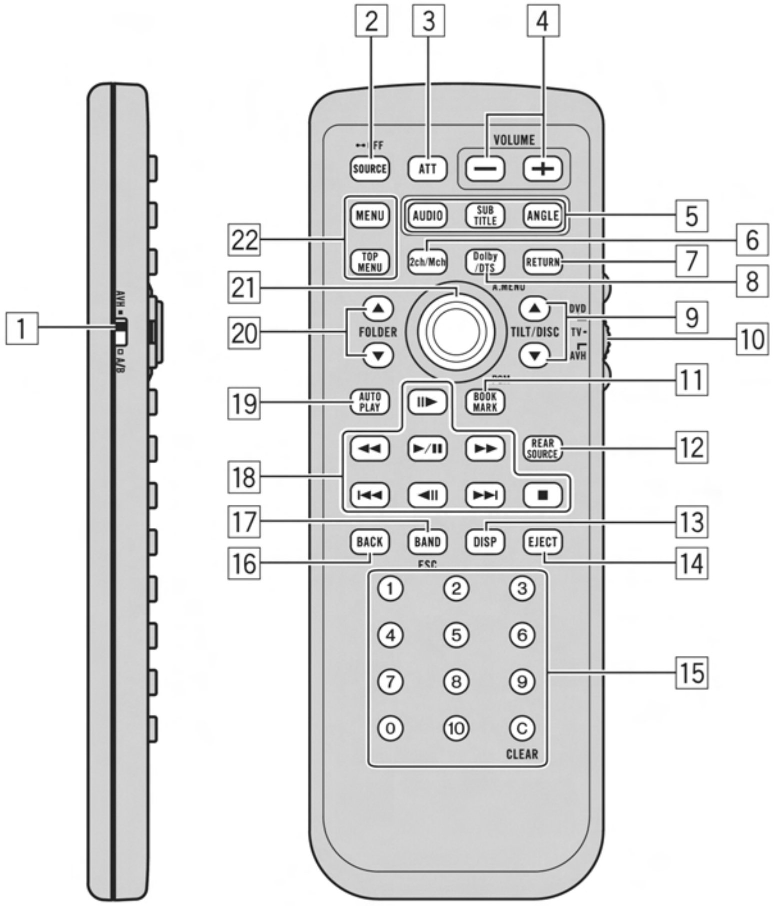
❸ **Volume level indicator**
Shows the value of current volume level.

❹ **RDM indicator**
Shows when random play is turned on.

❺ **RPT indicator**
Shows when repeat play is turned on.

❻ **Sound setting indicator**
Shows what the sound setting has been selected.

❼ **Output setting indicator**
Shows what the output setting has been selected. ■


2
3
4
OFF
SOURCE
ATT
VOLUME
MENU
TOP MENU
AUDIO
SUB TITLE
ANGLE
2ch/Mch
Dolby /DTS
RETURN
A.MENU
FOLDER
TILT/DISC
DVD
TV
AVH
AUTO PLAY
BOOK MARK
REAR SOURCE
BACK
BAND
DISP
EJECT
ESC
1 2 3 4 5 6 7 8 9 0 10 C
CLEAR
AVH
CD/B
1
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22

Remote control

	Button names	AVH mode	DVD mode with remote control code AVH
1	Remote control selection switch	Switch to change the setting of the remote control.	
2	**SOURCE** button	Press to cycle through all the available sources. Press and hold to turn the source off.	
3	**ATT** button	Press to quickly lower the volume level, by about 90%. Press once more to return to the original volume level.	
4	**VOLUME** buttons	Press to increase or decrease the volume.	
5	**AUDIO** button	Press to change the audio language during DVD playback.	
	SUBTITLE button	Press to change the subtitle language during DVD playback.	
	ANGLE button	Press to change the viewing angle during DVD playback.	

	Button names	AVH mode	DVD mode with remote control code AVH
6	**2ch/Mch** button	Press to switch between the multi-channel output and 2-channel output.	
7	**RETURN** button	Press to display the PBC (playback control) menu during PBC playback. When playing DVD video, press to return to the manufacturer-set position on the disc.	
8	**Dolby/DTS** button	Press to switch between surround sound setting (Dolby Pro Logic II or DTS Neo:6).	
9	▲/▼ buttons (**TILT/DISC**)	Press to adjust the LCD panel angle.	Not used.
10	Remote control operation mode switch	Switch the operation mode between **AVH**, **DVD** and **TV** modes. Normally, set to **AVH**. For details, refer to *Using the remote control operation mode switch* on the next page.	
11	**BOOKMARK** button	Press to operate the preprogrammed functions for each source.	Press to turn the bookmark function on or off.
12	**REAR SOURCE** button	Press to switch between the video sources (such as **DVD** or **AV**) on rear display.	
13	**DISPLAY** button	Press to turn the information display on or off when the video is displayed.	
14	**EJECT** button	Press to eject a disc from this unit. Press and hold to bookmark a disc at the point you want to bookmark.	Not used.
15	**0** to **10** buttons, **CLEAR** button	Press **0** to **10** to input numbers. Buttons **1** to **6** can operate the preset tuning for the tuner or disc changing for DVD player or multi-CD player. Press **CLEAR** to clear the input numbers.	Press to select a menu item on Video CDs featuring PBC (playback control) or DVD video.
16	**BACK** button	Press to return to the previous display.	Not used.
17	**BAND/ESC** button	Press to select among three FM bands and to cancel the control mode of functions. Press to switch between media file types.	Press to switch between media file types.

	Button names	AVH mode	DVD mode with remote control code AVH
18	**PLAY/PAUSE** (▶/❚❚) button	Press to switch sequentially between playback and pause.	
	REVERSE (◀◀) button	Press to perform fast reverse.	
	FORWARD (▶▶) button	Press to perform fast forward.	
	PREVIOUS (|◀◀) button	Press to return to the previous track (chapter).	
	NEXT (▶▶|) button	Press to go to the next track (chapter).	
	STEP (❚❚▶/◀❚❚) buttons	Press to move ahead one frame at a time during DVD/VideoCD playback. Press and hold for one second to activate slow playback.	
	STOP (■) button	Press to stop playback.	
19	**AUTO PLAY** button	Press to turn the DVD auto-playback function on or off.	
20	▲/▼ buttons (**FOLDER**)	Press to select the next/previous title, group or folder.	
21	Thumb pad	Move to do fast forward, reverse and track search controls. Click to recall **AUDIO MENU**.	Move to select a menu on the DVD menu.
22	**MENU** button	Press to display the DVD menu during DVD playback.	
	TOP MENU button	Press to return to the top menu during DVD playback.	

Using the remote control operation mode switch

There are three remote control operation modes on the remote control.

AVH mode operation

When operating this unit by remote control, the mode is normally switched to **AVH**.

- The thumb pad on the remote control can perform the same operations as the joystick on the head unit. Furthermore, the thumb pad can perform the same operations as the touch panel keys ↑, ↓, ← and →.
- **1** to **6** can perform the same operations as the preset tuning keys **P1** to **P6** and the disc selection keys **01** to **06**.
  - — If you want to select a disc located at 7 to 12 by using buttons **1** to **6**, press and hold the corresponding numbers, such as **1** for disc 7, until the disc number appears in the display.

DVD mode operation

If you switch the mode to **DVD**, the thumb pad and **0** to **10** operations are changed for DVD player.

● When you want to operate the following functions, switch the mode to DVD:

- When operating the DVD menu by using the thumb pad.
- When browsing still pictures by using the thumb pad.
- When operating the PBC menu by using **0** to **10**.

TV mode operation

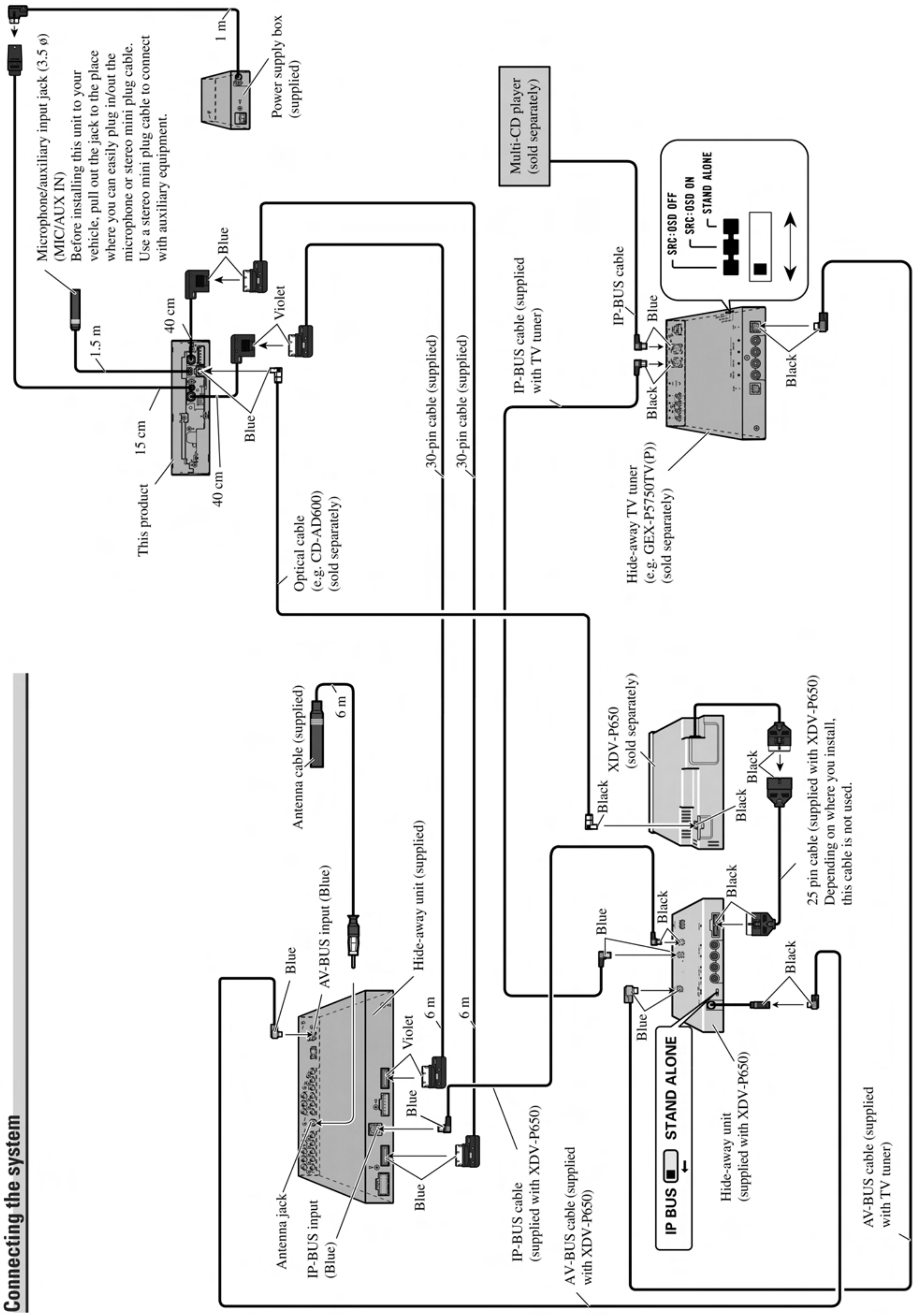
TV operations available with a Pioneer TV tuner (e.g. GEX-P5750TV (P)) can be controled with **AVH** mode. **TV** mode is not used with this unit.

- For details concerning operation, refer to the TV tuner's operation manuals.

● When you want to operate the following functions only on the rear display, switch the mode to TV:

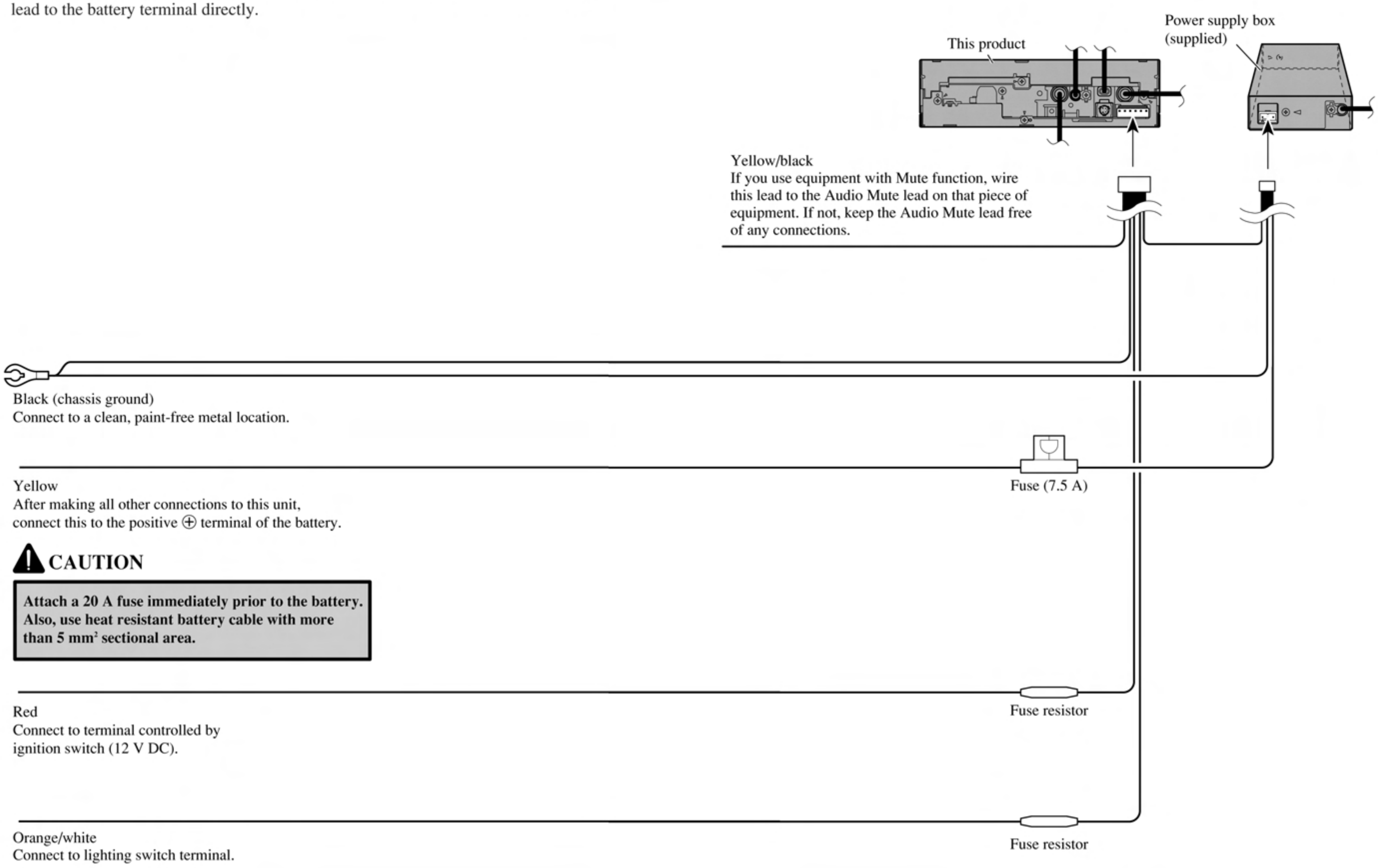
- When performing manual or seek tuning by moving the thumb pad left or right.
- When recalling preset stations by moving the thumb pad up or down. ■

2.4 CONNECTION DIAGRAM


Connecting the system
Microphone/auxiliary input jack (3.5 ø)
(MIC/AUX IN)
Before installing this unit to your vehicle, pull out the jack to the place where you can easily plug in/out the microphone or stereo mini plug cable.
Use a stereo mini plug cable to connect with auxiliary equipment.
1 m
Power supply box
(supplied)
1.5 m
15 cm
40 cm
40 cm
This product
Blue
Violet
Blue
30-pin cable (supplied)
30-pin cable (supplied)
Optical cable
(e.g. CD-AD600)
(sold separately)
Multi-CD player
(sold separately)
IP-BUS cable (supplied with TV tuner)
IP-BUS cable
Blue
Black
Black
SRC:OSD OFF
SRC:OSD ON
STAND ALONE
Hide-away TV tuner
(e.g. GEX-P5750TV(P))
(sold separately)
Antenna cable (supplied)
6 m
AV-BUS input (Blue)
Hide-away unit (supplied)
Blue
6 m
6 m
Violet
Blue
Blue
Antenna jack
IP-BUS input
(Blue)
IP-BUS cable
(supplied with XDV-P650)
AV-BUS cable (supplied with XDV-P650)
XDV-P650
(sold separately)
Black
Black
Black
25 pin cable (supplied with XDV-P650)
Depending on where you install, this cable is not used.
Black
Black
Blue
Blue
Black
IP BUS
STAND ALONE
Hide-away unit
(supplied with XDV-P650)
AV-BUS cable (supplied
with TV tuner)

Connecting the power cord (1)

If this unit is used with more than a 6-ch speaker system, be sure to connect the yellow lead to the battery terminal directly.



Yellow/black
If you use equipment with Mute function, wire this lead to the Audio Mute lead on that piece of equipment. If not, keep the Audio Mute lead free of any connections.

Black (chassis ground)
Connect to a clean, paint-free metal location.

Yellow
After making all other connections to this unit, connect this to the positive ⊕ terminal of the battery.

⚠ CAUTION

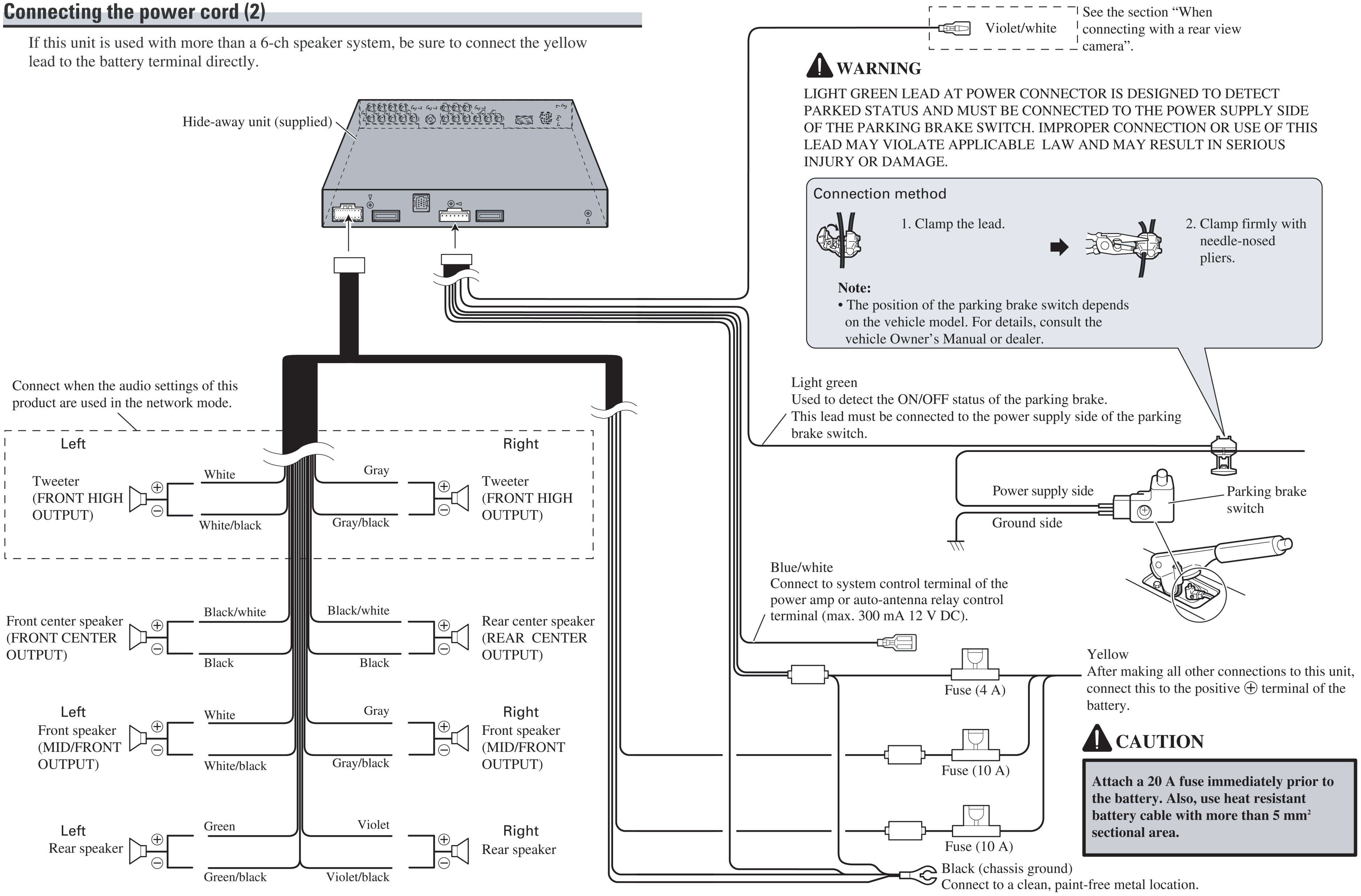
Attach a 20 A fuse immediately prior to the battery. Also, use heat resistant battery cable with more than 5 mm² sectional area.

Red
Connect to terminal controlled by ignition switch (12 V DC).

Orange/white
Connect to lighting switch terminal.

Connecting the power cord (2)

If this unit is used with more than a 6-ch speaker system, be sure to connect the yellow lead to the battery terminal directly.


Violet/white
See the section "When connecting with a rear view camera".
Hide-away unit (supplied)
Connect when the audio settings of this product are used in the network mode.
Left
Tweeter (FRONT HIGH OUTPUT)
White
White/black
Gray
Gray/black
Right
Tweeter (FRONT HIGH OUTPUT)
Front center speaker (FRONT CENTER OUTPUT)
Black/white
Black
Black/white
Black
Rear center speaker (REAR CENTER OUTPUT)
Left
Front speaker (MID/FRONT OUTPUT)
White
White/black
Gray
Gray/black
Right
Front speaker (MID/FRONT OUTPUT)
Left
Rear speaker
Green
Green/black
Violet
Violet/black
Right
Rear speaker
Light green
Used to detect the ON/OFF status of the parking brake.
This lead must be connected to the power supply side of the parking brake switch.
Power supply side
Ground side
Parking brake switch
Blue/white
Connect to system control terminal of the power amp or auto-antenna relay control terminal (max. 300 mA 12 V DC).
Fuse (4 A)
Fuse (10 A)
Fuse (10 A)
Yellow
After making all other connections to this unit, connect this to the positive ⊕ terminal of the battery.
Black (chassis ground)
Connect to a clean, paint-free metal location.

⚠ WARNING

LIGHT GREEN LEAD AT POWER CONNECTOR IS DESIGNED TO DETECT PARKED STATUS AND MUST BE CONNECTED TO THE POWER SUPPLY SIDE OF THE PARKING BRAKE SWITCH. IMPROPER CONNECTION OR USE OF THIS LEAD MAY VIOLATE APPLICABLE LAW AND MAY RESULT IN SERIOUS INJURY OR DAMAGE.

Connection method

1. Clamp the lead.
2. Clamp firmly with needle-nosed pliers.

Note:
- The position of the parking brake switch depends on the vehicle model. For details, consult the vehicle Owner's Manual or dealer.

⚠ CAUTION

Attach a 20 A fuse immediately prior to the battery. Also, use heat resistant battery cable with more than 5 mm² sectional area.

3. BASIC ITEMS FOR SERVICE

3.1 CHECK POINTS AFTER SERVICING

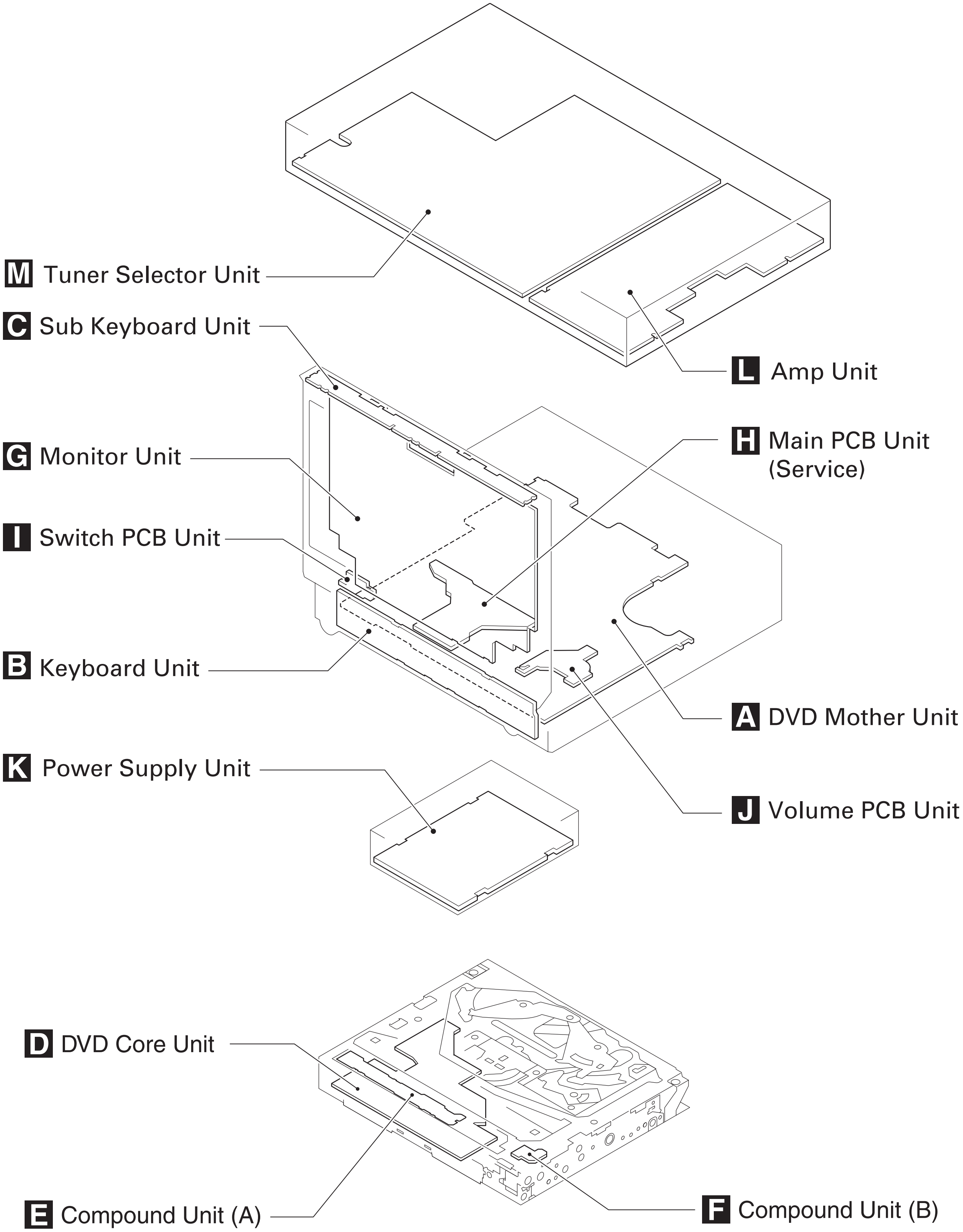
To keep the product quality after servicing, please confirm following check points.

NO		Procedures	Check points	Remark
1		Confirm whether the customer complain has been solved. If the customer complain occurs with the specific media, use it for the operation check.	The customer complain must not be reappeared. Display, video, audio and operations must be normal.	
2	Flap-mecha	Check the operation of the flap mechanism.	The flap mechanism operation must be smooth without making the noise and scratches.	When flap-mecha exists
3	DVD	Measure playback error rates at the innermost and outermost tracks by using the test mode with the following disc. DVD test disc (GGV1018)	Deterioration of mecha-drive can be checked. The error rates must be less than 2.5e-4.	
4	DVD	Play back a DVD. (Menu operation; Title/chapter search)	Display, video, audio and operations must be normal.	
5	CD	Play back a CD. (Track search)	Display, audio and operations must be normal.	
6	FM/AM tuner	Check FM/AM tuner action. (Seek, Preset) Switch band to check both FM and AM.	Display, audio and operations must be normal.	
7	TV tuner	Check TV tuner action. (Seek; Preset)	Display, video, audio and operations must be normal.	
8		Check whether no disc is inside the product.	The media used for the operating check must be ejected.	
9		Appearance check	No scratches or dirt on its appearance after receiving it for service.	

See the table below for the items to be checked regarding video and audio:

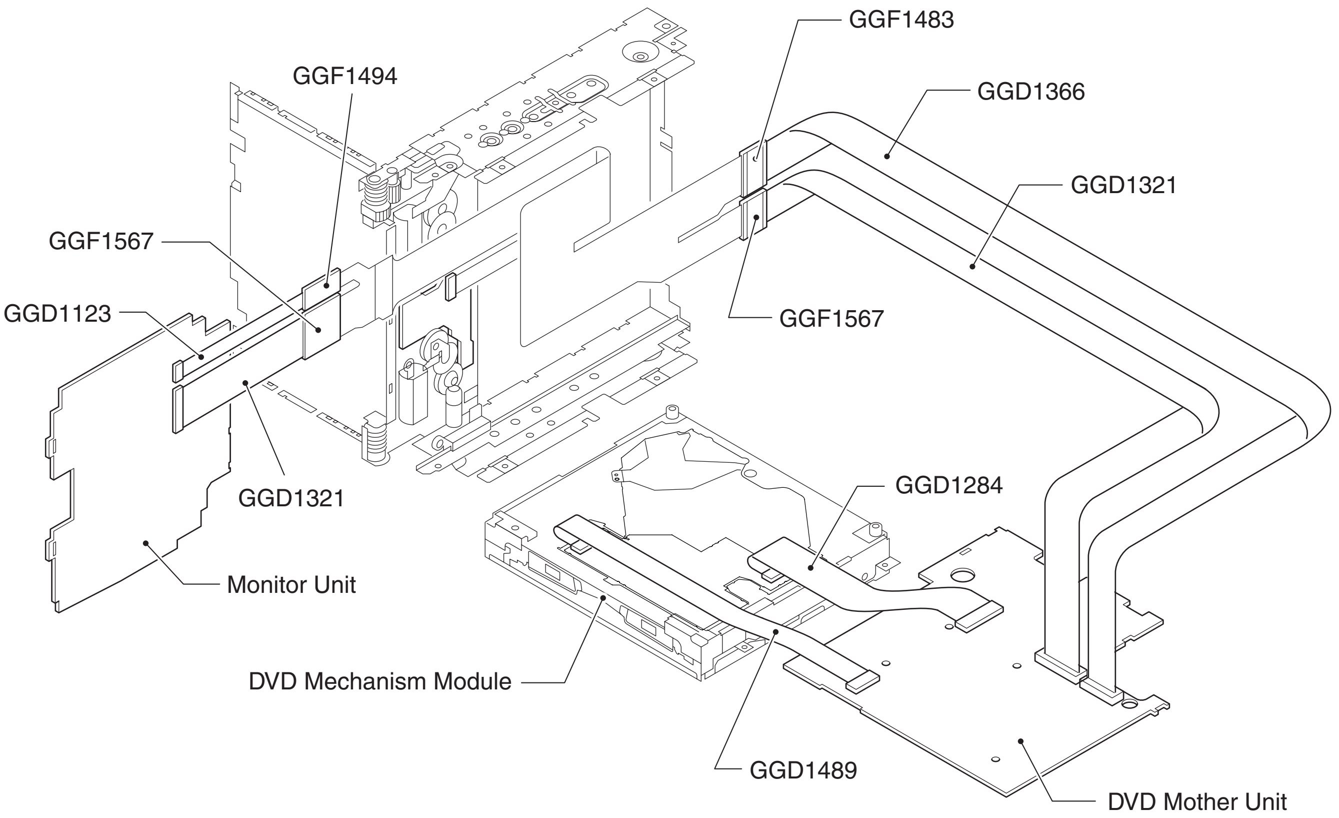
Item to be checked regarding video	**Item to be checked regarding audio**
Block-noise	Distortion
Horizontal noise	Noise
Dot noise	Volume too low
Disturbed image (video jumpiness)	Volume too high
Too dark	Volume fluctuating
Too bright	Sound interrupted
Mottled color	

3.2 PCB LOCATIONS


M Tuner Selector Unit
C Sub Keyboard Unit
L Amp Unit
H Main PCB Unit (Service)
G Monitor Unit
I Switch PCB Unit
B Keyboard Unit
A DVD Mother Unit
K Power Supply Unit
J Volume PCB Unit
D DVD Core Unit
E Compound Unit (A)
F Compound Unit (B)

Unit Number : CWN2477(RC)
Unit Number : CWN2478(RD)
Unit Number : CWN2479(RI)
Unit Number : CWN2480(CN5)
Unit Name : DVD Mother Unit
Unit Number :
Unit Name : Keyboard Unit
Unit Number : CWN2486
Unit Name : Sub Keyboard Unit
Unit Number : CWN2483
Unit Name : Monitor Unit
Unit Number : CXX2316
Unit Name : Main PCB Unit(Service)
Unit Number : CZW5029
Unit Name : Switch PCB Unit
Unit Number : CZW5028
Unit Name : Volume PCB Unit
Unit Number : CWN2489
Unit Name : Power Supply Unit
Unit Number : CWN2493
Unit Name : Amp Unit
Unit Number : CWN2491
Unit Name : Tuner Selector Unit
Unit Number : YWX5004
Unit Name : DVD Core Unit
Unit Number : CWX3154
Unit Name : Compound Unit(A)
Unit Number : CWX3394
Unit Name : Compound Unit(B)

3.3 JIG CONNECTION DIAGRAM


GGF1483
GGF1494
GGD1366
GGD1321
GGF1567
GGD1123
GGF1567
GGD1321
GGD1284
Monitor Unit
DVD Mechanism Module
GGD1489
DVD Mother Unit

Jigs List

Name	Jig No.	Remarks
Extension Cord	GGD1489	DVD Mother Unit <=> DVD Mechanism Module
Extension Cord	GGD1284	DVD Mother Unit <=> DVD Mechanism Module
Extension Cord	GGD1321	DVD Mother Unit <=> Monitor Unit
Extension Cord	GGD1366	DVD Mother Unit <=> Monitor Unit
Extension Cord	GGD1123	DVD Mother Unit <=> Monitor Unit
Extension Cord	GGD1321	DVD Mother Unit <=> Monitor Unit
Relay PCB	GGF1567	DVD Mother Unit <=> Monitor Unit
Relay PCB	GGF1483	DVD Mother Unit <=> Monitor Unit
Relay PCB	GGF1494	DVD Mother Unit <=> Monitor Unit
Relay PCB	GGF1567	DVD Mother Unit <=> Monitor Unit
Disc	GGV1018	SKEW adjustment
TORX driver(T2)	GGK1095	SKEW adjustment

Grease List

Name	Jig No.	Remarks
Grease	GEM1024	DVD Mechanism Module and Chassis
Grease	GEM1043	DVD Mechanism Module and Chassis
Grease	GEM1045	DVD Mechanism Module
Grease	GEM1050	DVD Mechanism Module
Locking agents	1401M	DVD Mechanism Module (1401M:produced by THREE BOND)
Grease	GEM1011	Chassis
Grease	GEM1047	Chassis
Grease	GEM1071	Chassis
Grease	GEM1072	Chassis
Grease	GEM1070	Chassis
Bond	GEM1033	SKEW adjustment

CLEANING

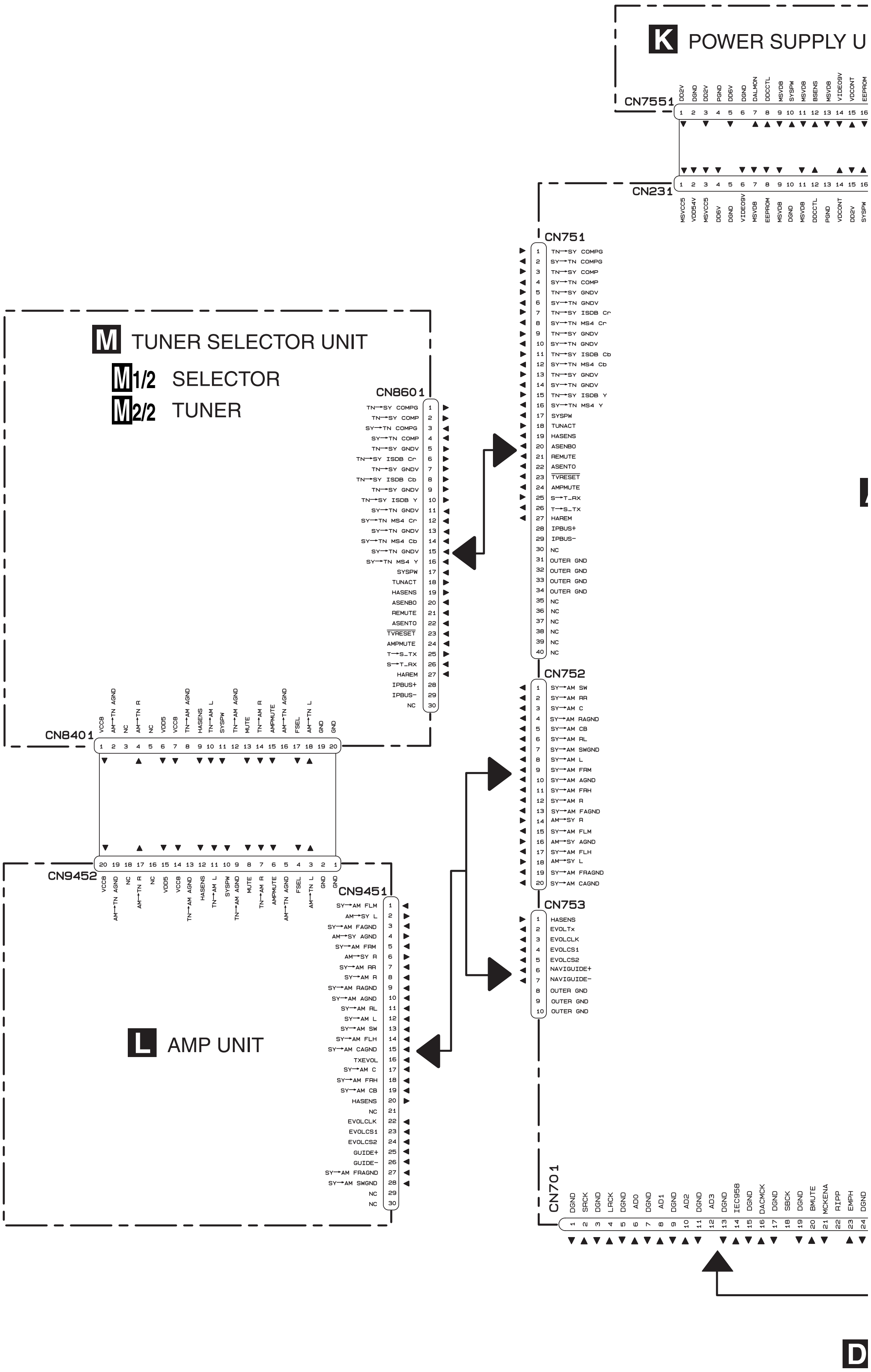
Before shipping out the product, be sure to clean the following portions by using the prescribed cleaning tools:

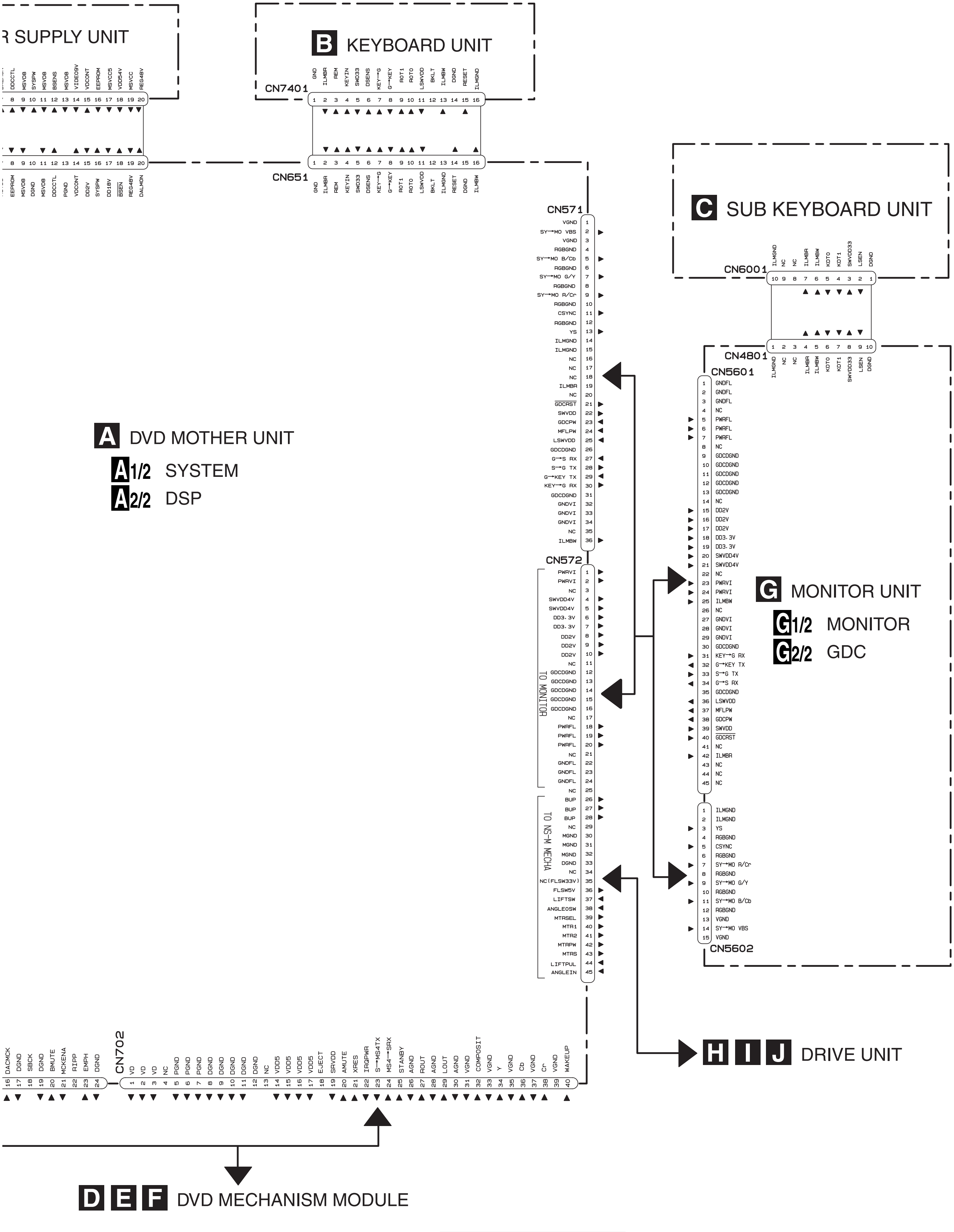
Portions to be cleaned	Cleaning tools
DVD pickup lenses	Cleaning liquid : GEM1004 Cleaning paper : GED-008

Portions to be cleaned	Cleaning tools
Fans	Cleaning paper : GED-008

4. BLOCK DIAGRAM

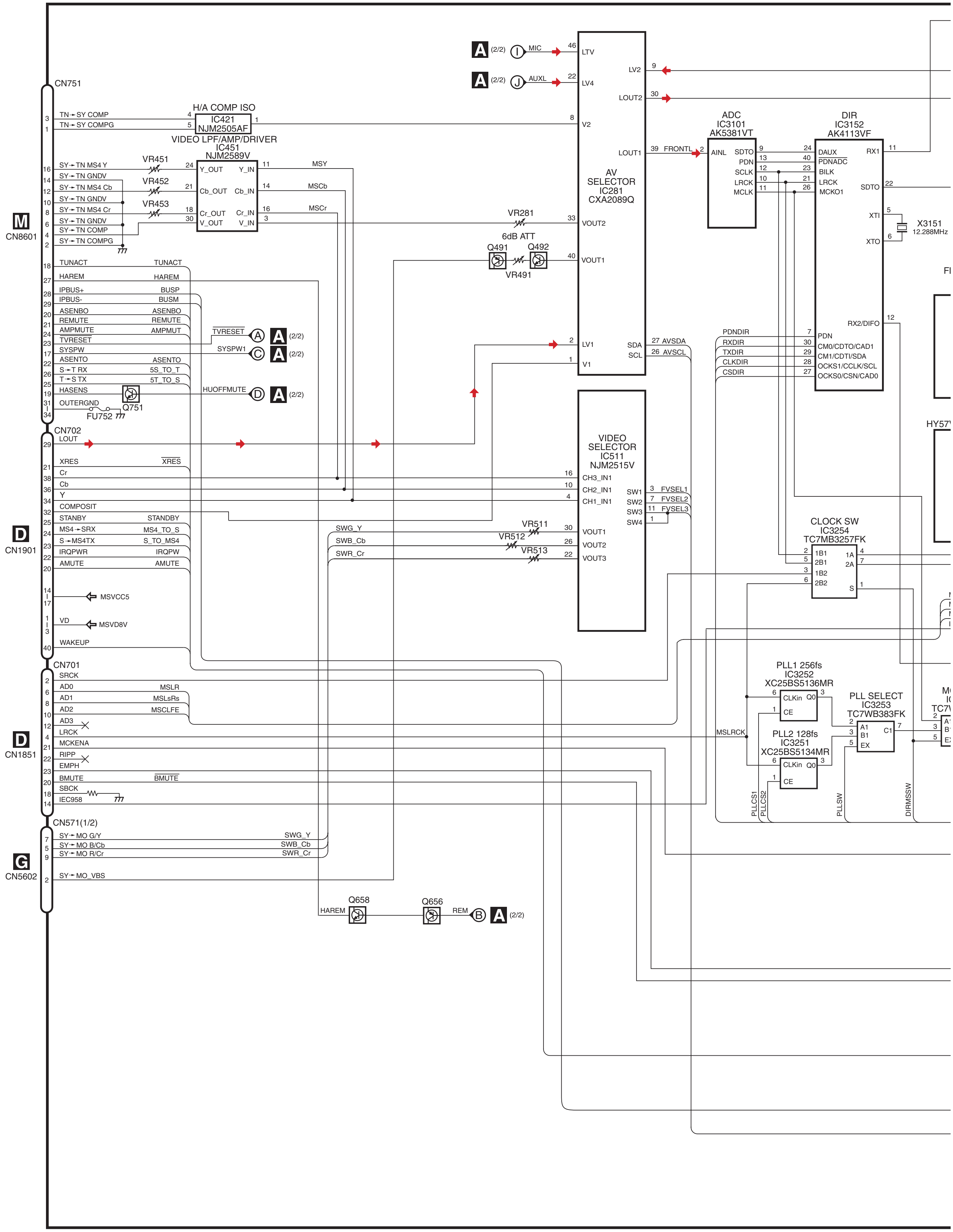
4.1 OVERALL CONNECTION DIAGRAM

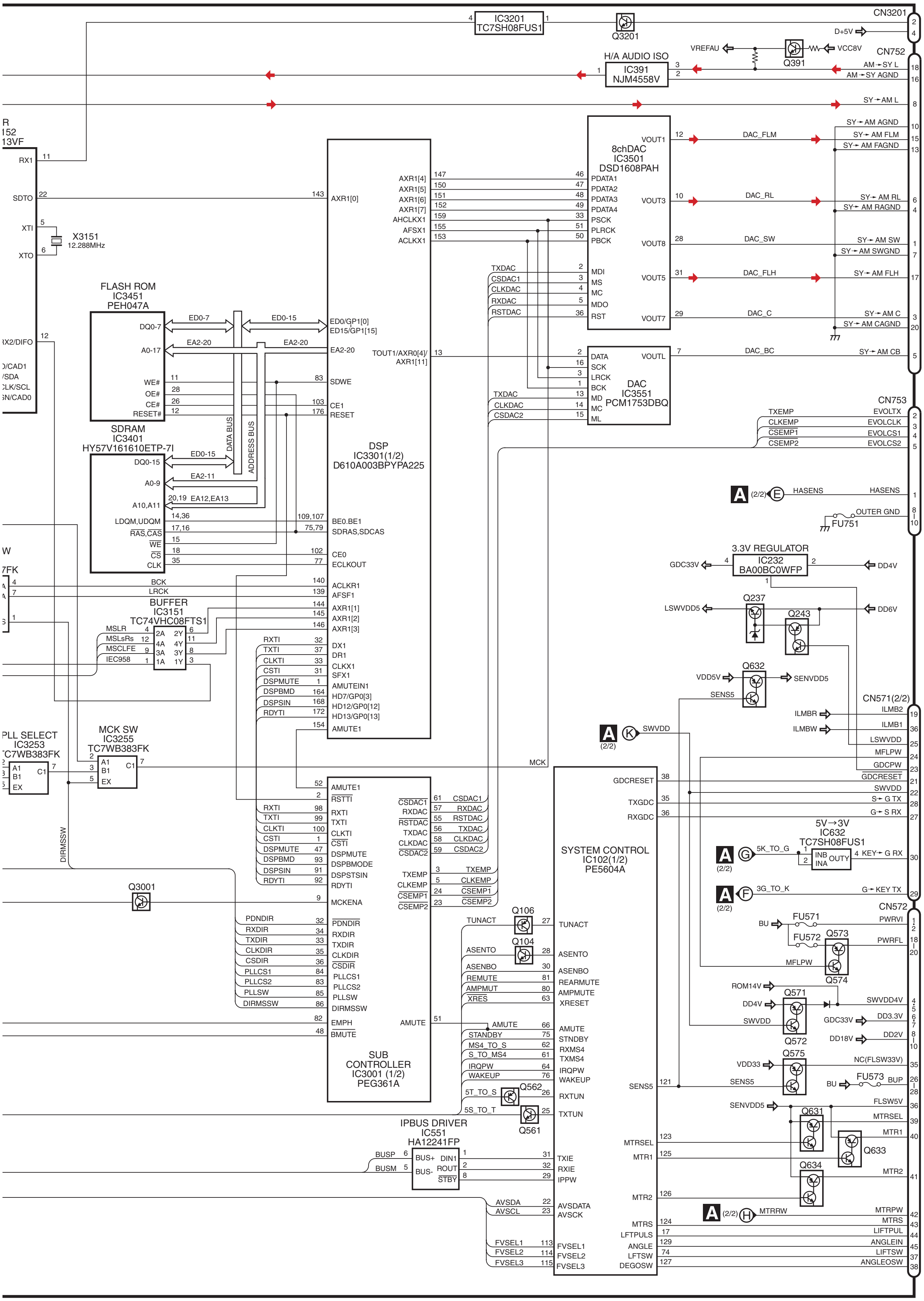

K
POWER SUPPLY U
CN7551
1 DD2V
2 DGND
3 DD2V
4 PGND
5 DD6V
6 DGND
7 DALMON
8 DDCCTL
9 MSVD8
10 SYSPW
11 MSVD8
12 BSENS
13 MSVD8
14 VIDEO9V
15 VDCONT
16 EEPROM
CN231
1 MSVCC5
2 VDD54V
3 MSVCC5
4 DD6V
5 DGND
6 VIDEO9V
7 MSVD8
8 EEPROM
9 MSVD8
10 DGND
11 MSVD8
12 DDCCTL
13 PGND
14 VDCONT
15 DD2V
16 SYSPW
CN751
1 TN→SY COMPG
2 SY→TN COMPG
3 TN→SY COMP
4 SY→TN COMP
5 TN→SY GNDV
6 SY→TN GNDV
7 TN→SY ISDB Cr
8 SY→TN MS4 Cr
9 TN→SY GNDV
10 SY→TN GNDV
11 TN→SY ISDB Cb
12 SY→TN MS4 Cb
13 TN→SY GNDV
14 SY→TN GNDV
15 TN→SY ISDB Y
16 SY→TN MS4 Y
17 SYSPW
18 TUNACT
19 HASENS
20 ASENBO
21 REMUTE
22 ASENTO
23 TVRESET
24 AMPMUTE
25 S→T_RX
26 T→S_TX
27 HAREM
28 IPBUS+
29 IPBUS−
30 NC
31 OUTER GND
32 OUTER GND
33 OUTER GND
34 OUTER GND
35 NC
36 NC
37 NC
38 NC
39 NC
40 NC
M
TUNER SELECTOR UNIT
M1/2 SELECTOR
M2/2 TUNER
CN8601
1 TN→SY COMPG
2 TN→SY COMP
3 SY→TN COMPG
4 SY→TN COMP
5 TN→SY GNDV
6 TN→SY ISDB Cr
7 TN→SY GNDV
8 TN→SY ISDB Cb
9 TN→SY GNDV
10 TN→SY ISDB Y
11 SY→TN GNDV
12 SY→TN MS4 Cr
13 SY→TN GNDV
14 SY→TN MS4 Cb
15 SY→TN GNDV
16 SY→TN MS4 Y
17 SYSPW
18 TUNACT
19 HASENS
20 ASENBO
21 REMUTE
22 ASENTO
23 TVRESET
24 AMPMUTE
25 T→S_TX
26 S→T_RX
27 HAREM
28 IPBUS+
29 IPBUS−
30 NC
CN8401
1 VCC8
2 AM→TN AGND
3 NC
4 AM→TN R
5 NC
6 VDD5
7 VCC8
8 TN→AM AGND
9 HASENS
10 TN→AM L
11 SYSPW
12 TN→AM AGND
13 MUTE
14 TN→AM R
15 AMPMUTE
16 AM→TN AGND
17 FSEL
18 AM→TN L
19 GND
20 GND
CN9452
20 VCC8
19 AM→TN AGND
18 NC
17 AM→TN R
16 NC
15 VDD5
14 VCC8
13 TN→AM AGND
12 HASENS
11 TN→AM L
10 SYSPW
9 TN→AM AGND
8 MUTE
7 TN→AM R
6 AMPMUTE
5 AM→TN AGND
4 FSEL
3 AM→TN L
2 GND
1 GND
CN752
1 SY→AM SW
2 SY→AM RR
3 SY→AM C
4 SY→AM RAGND
5 SY→AM CB
6 SY→AM RL
7 SY→AM SWGND
8 SY→AM L
9 SY→AM FRM
10 SY→AM AGND
11 SY→AM FRH
12 SY→AM R
13 SY→AM FAGND
14 AM→SY R
15 SY→AM FLM
16 AM→SY AGND
17 SY→AM FLH
18 AM→SY L
19 SY→AM FRAGND
20 SY→AM CAGND
CN9451
1 SY→AM FLM
2 AM→SY L
3 SY→AM FAGND
4 AM→SY AGND
5 SY→AM FRM
6 AM→SY R
7 SY→AM RR
8 SY→AM R
9 SY→AM RAGND
10 SY→AM AGND
11 SY→AM RL
12 SY→AM L
13 SY→AM SW
14 SY→AM FLH
15 SY→AM CAGND
16 TXEVOL
17 SY→AM C
18 SY→AM FRH
19 SY→AM CB
20 HASENS
21 NC
22 EVOLCLK
23 EVOLCS1
24 EVOLCS2
25 GUIDE+
26 GUIDE−
27 SY→AM FRAGND
28 SY→AM SWGND
29 NC
30 NC
CN753
1 HASENS
2 EVOLTx
3 EVOLCLK
4 EVOLCS1
5 EVOLCS2
6 NAVIGUIDE+
7 NAVIGUIDE−
8 OUTER GND
9 OUTER GND
10 OUTER GND
L
AMP UNIT
CN701
1 DGND
2 SRCK
3 DGND
4 LRCK
5 DGND
6 AD0
7 DGND
8 AD1
9 DGND
10 AD2
11 DGND
12 AD3
13 DGND
14 IEC958
15 DGND
16 DACMCK
17 DGND
18 SBCK
19 DGND
20 BMUTE
21 MCKENA
22 RIPP
23 EMPH
24 DGND
D


SUPPLY UNIT
DDCCTL MSVD8 SYSPW MSVD8 BSENS MSVD8 VIDEO9V VDCONT EEPROM MSVCC5 VDD54V MSVCC REG48V
B KEYBOARD UNIT
CN7401
GND ILMBR REM KEYIN SWD33 DSENS KEY→G G→KEY ROT1 ROTO LSWVDD BKLT ILMBW DGND RESET ILMGND
CN651
GND ILMBR REM KEYIN SWD33 DSENS KEY→G G→KEY ROT1 ROTO LSWVDD BKLT ILMGND RESET DGND ILMBW
EEPROM MSVD8 DGND MSVD8 DDCCTL PGND VDCONT DD2V SYSPW DD18V BSEN REG48V DALMON
C SUB KEYBOARD UNIT
CN6001
ILMGND NC NC ILMBR ILMBW KDTO KDT1 SWVDD33 LSEN DGND
CN4801
ILMGND NC NC ILMBR ILMBW KDTO KDT1 SWVDD33 LSEN DGND
CN571
1 VGND
2 SY→MO VBS
3 VGND
4 RGBGND
5 SY→MO B/Cb
6 RGBGND
7 SY→MO G/Y
8 RGBGND
9 SY→MO R/Cr
10 RGBGND
11 CSYNC
12 RGBGND
13 YS
14 ILMGND
15 ILMGND
16 NC
17 NC
18 NC
19 ILMBR
20 NC
21 GDCRST
22 SWVDD
23 GDCPW
24 MFLPW
25 LSWVDD
26 GDCDGND
27 G→S RX
28 S→G TX
29 G→KEY TX
30 KEY→G RX
31 GDCDGND
32 GNDVI
33 GNDVI
34 GNDVI
35 NC
36 ILMBW
CN572
1 PWRVI
2 PWRVI
3 NC
4 SWVDD4V
5 SWVDD4V
6 DD3.3V
7 DD3.3V
8 DD2V
9 DD2V
10 DD2V
11 NC
12 GDCDGND
13 GDCDGND
14 GDCDGND
15 GDCDGND
16 GDCDGND
17 NC
18 PWRFL
19 PWRFL
20 PWRFL
21 NC
22 GNDFL
23 GNDFL
24 GNDFL
25 NC
26 BUP
27 BUP
28 BUP
29 NC
30 MGND
31 MGND
32 MGND
33 DGND
34 NC
35 NC(FLSW33V)
36 FLSW5V
37 LIFTSW
38 ANGLEOSW
39 MTRSEL
40 MTR1
41 MTR2
42 MTRPW
43 MTRS
44 LIFTPUL
45 ANGLEIN
TO MONITOR
TO NS-M MECHA
A DVD MOTHER UNIT
A1/2 SYSTEM
A2/2 DSP
CN5601
1 GNDFL
2 GNDFL
3 GNDFL
4 NC
5 PWRFL
6 PWRFL
7 PWRFL
8 NC
9 GDCDGND
10 GDCDGND
11 GDCDGND
12 GDCDGND
13 GDCDGND
14 NC
15 DD2V
16 DD2V
17 DD2V
18 DD3.3V
19 DD3.3V
20 SWVDD4V
21 SWVDD4V
22 NC
23 PWRVI
24 PWRVI
25 ILMBW
26 NC
27 GNDVI
28 GNDVI
29 GNDVI
30 GDCDGND
31 KEY→G RX
32 G→KEY TX
33 S→G TX
34 G→S RX
35 GDCDGND
36 LSWVDD
37 MFLPW
38 GDCPW
39 SWVDD
40 GDCRST
41 NC
42 ILMBR
43 NC
44 NC
45 NC
1 ILMGND
2 ILMGND
3 YS
4 RGBGND
5 CSYNC
6 RGBGND
7 SY→MO R/Cr
8 RGBGND
9 SY→MO G/Y
10 RGBGND
11 SY→MO B/Cb
12 RGBGND
13 VGND
14 SY→MO VBS
15 VGND
CN5602
G MONITOR UNIT
G1/2 MONITOR
G2/2 GDC
H I J DRIVE UNIT
16 DACMCK
17 DGND
18 SBCK
19 DGND
20 BMUTE
21 MCKENA
22 RIPP
23 EMPH
24 DGND
CN702
1 VD
2 VD
3 VD
4 NC
5 PGND
6 PGND
7 PGND
8 DGND
9 DGND
10 DGND
11 DGND
12 DGND
13 NC
14 VDD5
15 VDD5
16 VDD5
17 VDD5
18 EJECT
19 SRVDD
20 AMUTE
21 XRES
22 IRQPWR
23 S→MS4TX
24 MS4→SRX
25 STANBY
26 AGND
27 ROUT
28 AGND
29 LOUT
30 AGND
31 VGND
32 COMPOSIT
33 VGND
34 Y
35 VGND
36 Cb
37 VGND
38 Cr
39 VGND
40 WAKEUP
D E F DVD MECHANISM MODULE

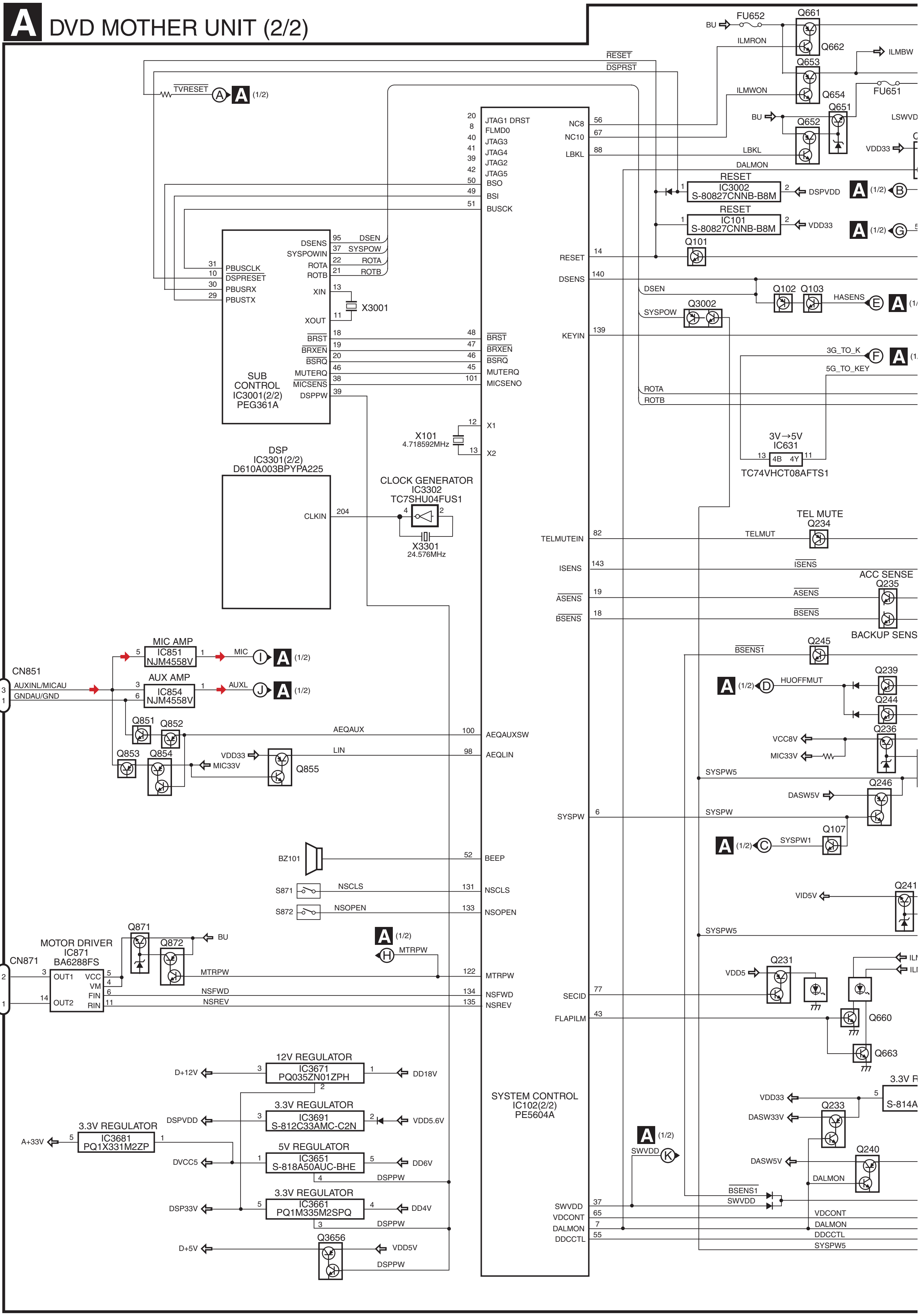
4.2 BLOCK DIAGRAM

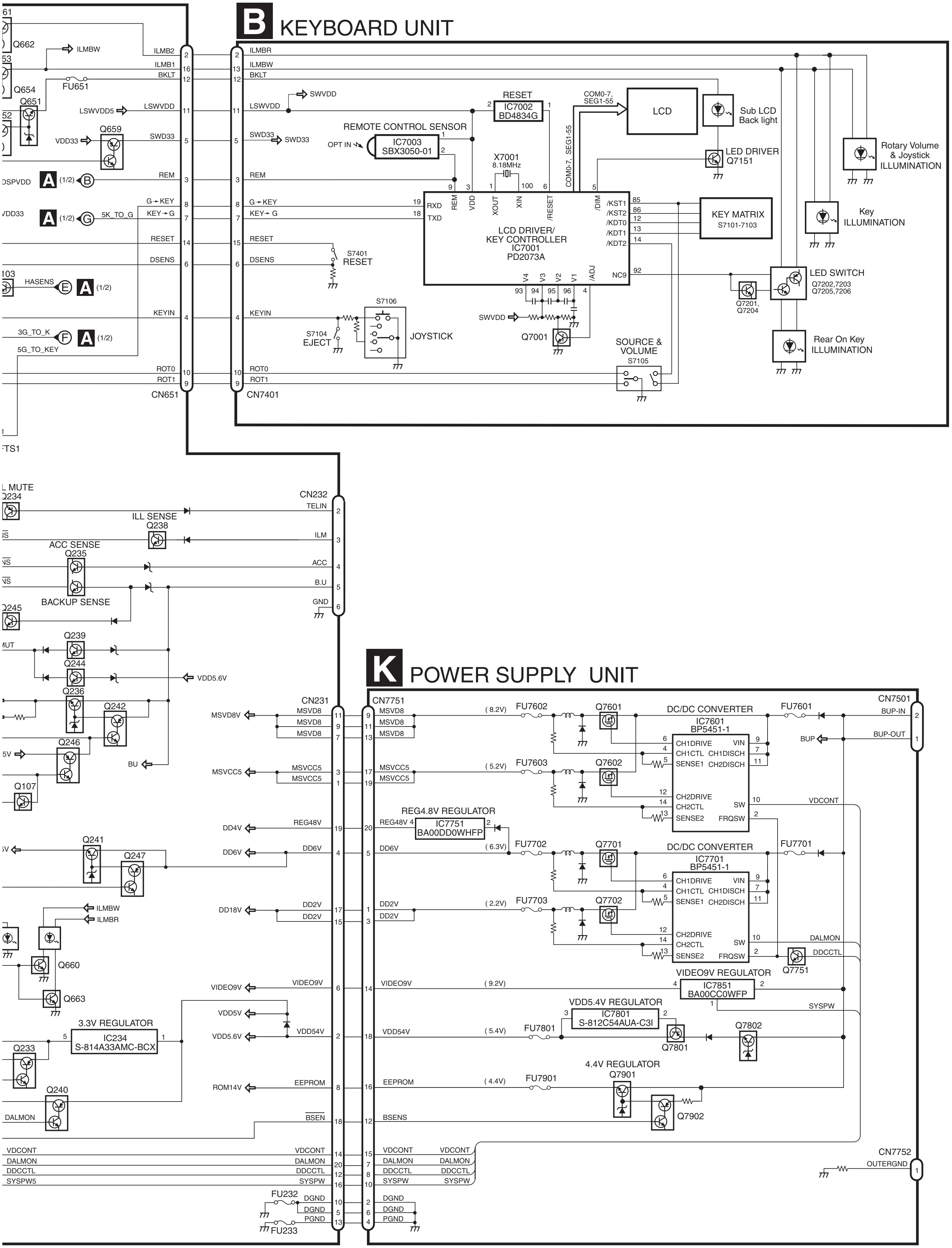
A DVD MOTHER UNIT(1/2)


A
B
C
D
E
F
CN751
M
CN8601
TN→SY COMP
TN→SY COMPG
H/A COMP ISO
IC421
NJM2505AF
VIDEO LPF/AMP/DRIVER
IC451
NJM2589V
VR451
VR452
VR453
SY→TN MS4 Y
SY→TN GNDV
SY→TN MS4 Cb
SY→TN GNDV
SY→TN MS4 Cr
SY→TN GNDV
SY→TN COMP
SY→TN COMPG
Y_OUT
Y_IN
Cb_OUT
Cb_IN
Cr_OUT
Cr_IN
V_OUT
V_IN
MSY
MSCb
MSCr
TUNACT
HAREM
IPBUS+
BUSP
IPBUS-
BUSM
ASENBO
REMUTE
AMPMUTE
TVRESET
SYSPW
SYSPW1
ASENTO
S→T RX
5S_TO_T
T→S TX
5T_TO_S
HASENS
HUOFFMUTE
OUTERGND
FU752
Q751
A (2/2)
MIC
AUXL
LTV
LV4
LV2
LOUT2
V2
LOUT1
FRONTL
AV SELECTOR
IC281
CXA2089Q
VR281
VOUT2
6dB ATT
Q491
Q492
VR491
VOUT1
LV1
V1
SDA
SCL
AVSDA
AVSCL
ADC
IC3101
AK5381VT
AINL
SDTO
PDN
SCLK
LRCK
MCLK
DIR
IC3152
AK4113VF
DAUX
PDNADC
BILK
MCKO1
RX1
SDTO
XTI
XTO
X3151
12.288MHz
RX2/DIFO
PDNDIR
RXDIR
TXDIR
CLKDIR
CSDIR
PDN
CM0/CDTO/CAD1
CM1/CDTI/SDA
OCKS1/CCLK/SCL
OCKS0/CSN/CAD0
FI
HY57
CN702
LOUT
XRES
Cr
Cb
Y
COMPOSIT
STANBY
STANDBY
MS4→SRX
MS4_TO_S
S→MS4TX
S_TO_MS4
IRQPWR
AMUTE
MSVCC5
VD
MSVD8V
WAKEUP
D
CN1901
VIDEO SELECTOR
IC511
NJM2515V
CH3_IN1
CH2_IN1
CH1_IN1
SW1
SW2
SW3
SW4
FVSEL1
FVSEL2
FVSEL3
SWG_Y
SWB_Cb
SWR_Cr
VR511
VR512
VR513
VOUT1
VOUT2
VOUT3
CLOCK SW
IC3254
TC7MB3257FK
1B1
2B1
1B2
2B2
1A
2A
S
CN701
SRCK
AD0
MSLR
AD1
MSLsRs
AD2
MSCLFE
AD3
LRCK
MCKENA
RIPP
EMPH
BMUTE
SBCK
IEC958
D
CN1851
PLL1 256fs
IC3252
XC25BS5136MR
CLKin
Q0
CE
PLL SELECT
IC3253
TC7WB383FK
A1
B1
EX
C1
PLL2 128fs
IC3251
XC25BS5134MR
MSLRCK
PLLCS1
PLLCS2
PLLSW
DIRMSSW
M
IC
TC7
CN571(1/2)
SY→MO G/Y
SY→MO B/Cb
SY→MO R/Cr
SY→MO_VBS
G
CN5602
Q658
Q656
REM
HAREM

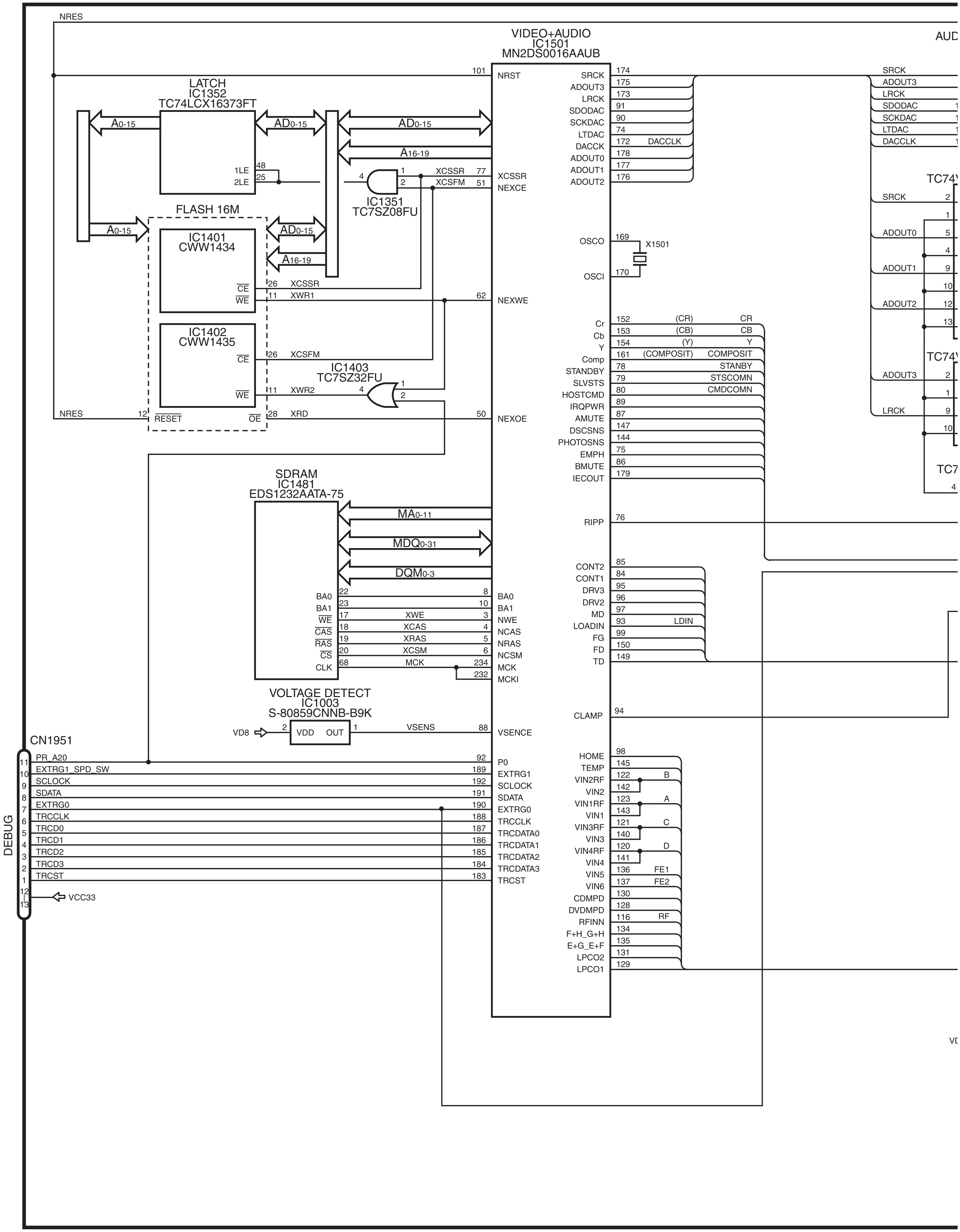

IC3201
TC7SH08FUS1
Q3201
CN3201
OPT IN
D+5V
VREFAU
Q391
VCC8V
CN752
H/A AUDIO ISO
IC391
NJM4558V
AM→SY L
AM→SY AGND
SY→AM L
SY→AM AGND
SY→AM FLM
SY→AM FAGND
8chDAC
IC3501
DSD1608PAH
VOUT1
VOUT3
VOUT8
VOUT5
VOUT7
PDATA1
PDATA2
PDATA3
PDATA4
PSCK
PLRCK
PBCK
MDI
MS
MC
MDO
RST
DAC_FLM
DAC_RL
DAC_SW
DAC_FLH
DAC_C
DAC_BC
SY→AM RL
SY→AM RAGND
SY→AM SW
SY→AM SWGND
SY→AM FLH
SY→AM C
SY→AM CAGND
SY→AM CB
CN9451
L
DAC
IC3551
PCM1753DBQ
DATA
SCK
LRCK
BCK
MD
MC
ML
VOUTL
TXDAC
CSDAC1
CLKDAC
RXDAC
RSTDAC
CSDAC2
CN753
TXEMP
CLKEMP
CSEMP1
CSEMP2
EVOLTX
EVOLCLK
EVOLCS1
EVOLCS2
HASENS
OUTER GND
FU751
RX1
SDTO
XTI
XTO
X3151
12.288MHz
FLASH ROM
IC3451
PEH047A
DQ0-7
A0-17
WE#
OE#
CE#
RESET#
ED0-7
ED0-15
EA2-20
SDRAM
IC3401
HY57V161610ETP-7I
DQ0-15
A0-9
A10,A11
LDQM,UDQM
RAS,CAS
WE
CS
CLK
ED0-15
EA2-11
EA12,EA13
DATA BUS
ADDRESS BUS
DSP
IC3301(1/2)
D610A003BPYPA225
AXR1[4]
AXR1[5]
AXR1[6]
AXR1[7]
AHCLKX1
AFSX1
ACLKX1
AXR1[0]
ED0/GP1[0]
ED15/GP1[15]
EA2-20
TOUT1/AXR0[4]/
AXR1[11]
SDWE
CE1
RESET
BE0.BE1
SDRAS,SDCAS
CE0
ECLKOUT
ACLKR1
AFSF1
AXR1[1]
AXR1[2]
AXR1[3]
DX1
DR1
CLKX1
SFX1
AMUTEIN1
HD7/GP0[3]
HD12/GP0[12]
HD13/GP0[13]
AMUTE1
BCK
LRCK
BUFFER
IC3151
TC74VHC08FTS1
MSLR
MSLsRs
MSCLFE
IEC958
RXTI
TXTI
CLKTI
CSTI
DSPMUTE
DSPBMD
DSPSIN
RDYTI
PLL SELECT
IC3253
TC7WB383FK
MCK SW
IC3255
TC7WB383FK
DIRMSSW
MCK
Q3001
SUB
CONTROLLER
IC3001 (1/2)
PEG361A
AMUTE1
RSTTI
RXTI
TXTI
CLKTI
CSTI
DSPMUTE
DSPBMODE
DSPSTSIN
RDYTI
MCKENA
PDNDIR
RXDIR
TXDIR
CLKDIR
CSDIR
PLLCS1
PLLCS2
PLLSW
DIRMSSW
EMPH
BMUTE
AMUTE
CSDAC1
RXDAC
RSTDAC
TXDAC
CLKDAC
CSDAC2
TXEMP
CLKEMP
CSEMP1
CSEMP2
SYSTEM CONTROL
IC102(1/2)
PE5604A
GDCRESET
TXGDC
RXGDC
TUNACT
ASENTO
ASENBO
REARMUTE
AMPMUTE
XRESET
AMUTE
STNDBY
RXMS4
TXMS4
IRQPW
WAKEUP
RXTUN
TXTUN
TXIE
RXIE
IPPW
AVSDATA
AVSCK
FVSEL1
FVSEL2
FVSEL3
SENS5
MTRSEL
MTR1
MTR2
MTRS
LFTPULS
ANGLE
LFTSW
DEGOSW
Q106
Q104
REMUTE
AMPMUT
XRES
STANDBY
MS4_TO_S
S_TO_MS4
IRQPW
WAKEUP
5T_TO_S
5S_TO_T
Q562
Q561
IPBUS DRIVER
IC551
HA12241FP
BUSP
BUSM
BUS+
BUS-
DIN1
ROUT
STBY
AVSDA
AVSCL
3.3V REGULATOR
IC232
BA00BC0WFP
GDC33V
DD4V
Q237
Q243
LSWVDD5
DD6V
Q632
VDD5V
SENVDD5
SENS5
A
(2/2)
E
H
K
G
F
SWVDD
CN571(2/2)
ILMBR
ILMBW
ILMB2
ILMB1
LSWVDD
MFLPW
GDCPW
GDCRESET
SWVDD
S→G TX
G→S RX
CN5601
5V→3V
IC632
TC7SH08FUS1
5K_TO_G
INB
INA
OUTY
KEY→G RX
3G_TO_K
G→KEY TX
CN572
BU
FU571
FU572
Q573
Q574
PWRVI
PWRFL
MFLPW
ROM14V
Q571
DD4V
SWVDD4V
SWVDD
Q572
GDC33V
DD3.3V
DD18V
DD2V
Q575
VDD33
SENS5
NC(FLSW33V)
FU573
BUP
SENVDD5
FLSW5V
Q631
Q633
Q634
MTRSEL
MTR1
MTR2
MTRRW
MTRPW
MTRS
LIFTPUL
ANGLEIN
LIFTSW
ANGLEOSW
CN101
H

A DVD MOTHER UNIT (2/2)

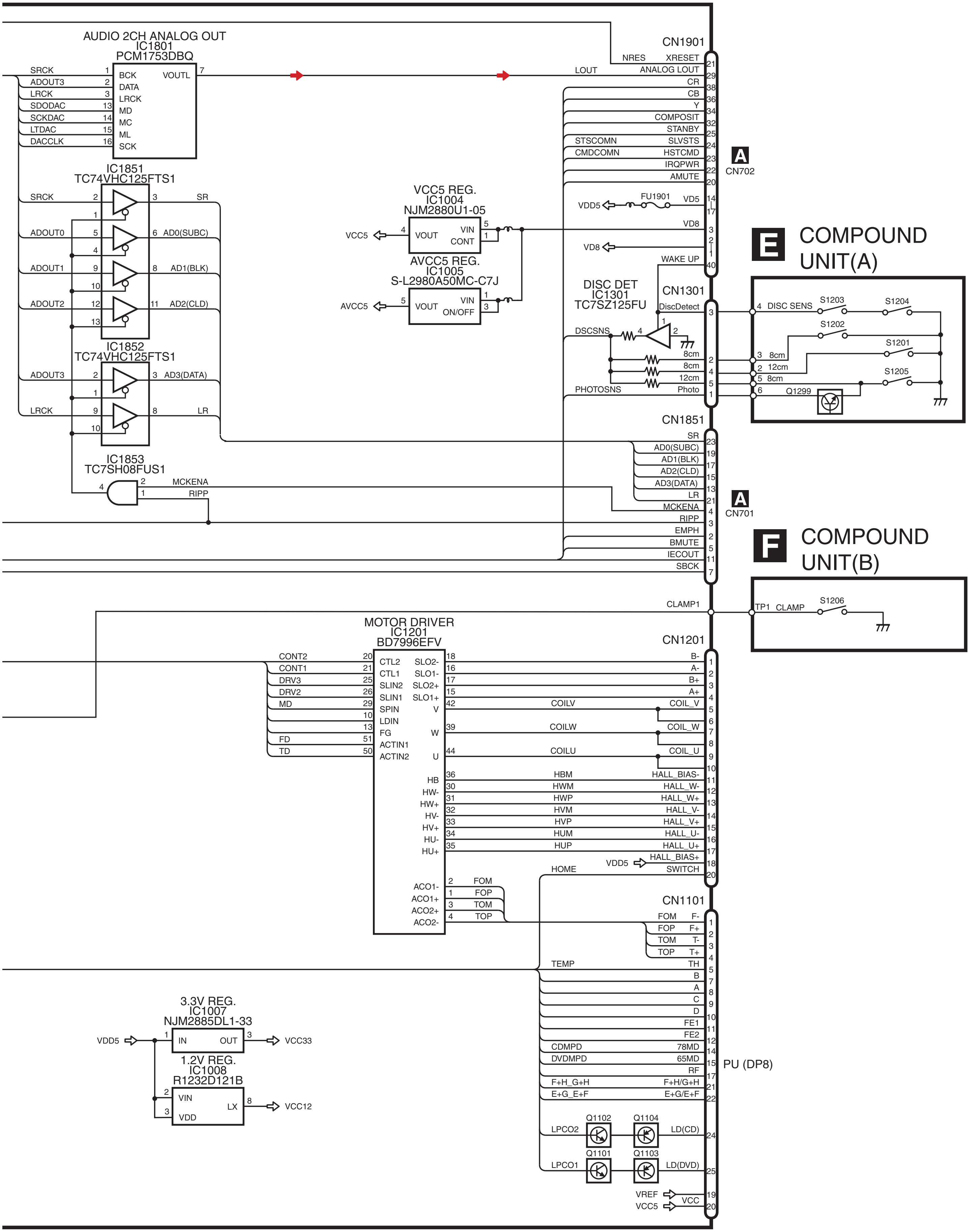

A
TVRESET
A (1/2)
RESET
DSPRST
FU652
BU
Q661
ILMRON
Q662
ILMBW
Q653
ILMWON
Q654
FU651
BU
Q652
Q651
LSWVD
VDD33
LBKL
DALMON
JTAG1 DRST
FLMD0
JTAG3
JTAG4
JTAG2
JTAG5
BSO
BSI
BUSCK
NC8
NC10
LBKL
RESET
IC3002
S-80827CNNB-B8M
DSPVDD
A (1/2) B
RESET
IC101
S-80827CNNB-B8M
VDD33
A (1/2) G
Q101
RESET
DSENS
DSEN
Q102 Q103
HASENS
E
SYSPOW
Q3002
KEYIN
3G_TO_K
F
5G_TO_KEY
ROTA
ROTB
3V→5V
IC631
4B 4Y
TC74VHCT08AFTS1
DSENS
SYSPOWIN
ROTA
ROTB
DSEN
SYSPOW
ROTA
ROTB
PBUSCLK
DSPRESET
PBUSRX
PBUSTX
XIN
X3001
XOUT
BRST
BRXEN
BSRQ
MUTERQ
MICSENS
DSPPW
SUB CONTROL
IC3001(2/2)
PEG361A
BRST
BRXEN
BSRQ
MUTERQ
MICSENO
X1
X2
X101
4.718592MHz
DSP
IC3301(2/2)
D610A003BPYPA225
CLKIN
CLOCK GENERATOR
IC3302
TC7SHU04FUS1
X3301
24.576MHz
TELMUTEIN
TEL MUTE
Q234
TELMUT
ISENS
ISENS
ACC SENSE
Q235
ASENS
ASENS
BSENS
BSENS
BACKUP SENS
BSENS1
Q245
Q239
A (1/2) D
HUOFFMUT
Q244
Q236
VCC8V
MIC33V
SYSPW5
Q246
DASW5V
SYSPW
SYSPW
Q107
A (1/2) C
SYSPW1
Q241
VID5V
SYSPW5
MIC AMP
IC851
NJM4558V
MIC
I
A (1/2)
CN851
AUXINL/MICAU
GNDAU/GND
MIC
AUX AMP
IC854
NJM4558V
AUXL
J
A (1/2)
Q851 Q852
Q853 Q854
AEQAUX
AEQAUXSW
VDD33
MIC33V
Q855
LIN
AEQLIN
SYSPW
BZ101
BEEP
S871
NSCLS
NSCLS
S872
NSOPEN
NSOPEN
A (1/2)
H
MTRPW
Q871
Q872
BU
MOTOR DRIVER
IC871
BA6288FS
CN871
MOTOR M
OUT1 VCC
VM
OUT2 FIN
RIN
MTRPW
NSFWD
NSREV
MTRPW
NSFWD
NSREV
SECID
Q231
VDD5
Q660
FLAPILM
Q663
12V REGULATOR
IC3671
PQ035ZN01ZPH
D+12V
DD18V
3.3V REGULATOR
IC3691
S-812C33AMC-C2N
DSPVDD
VDD5.6V
3.3V REGULATOR
IC3681
PQ1X331M2ZP
A+33V
5V REGULATOR
IC3651
S-818A50AUC-BHE
DVCC5
DD6V
DSPPW
3.3V REGULATOR
IC3661
PQ1M335M2SPQ
DSP33V
DD4V
DSPPW
Q3656
D+5V
VDD5V
DSPPW
SYSTEM CONTROL
IC102(2/2)
PE5604A
A (1/2)
SWVDD
K
SWVDD
VDCONT
DALMON
DDCCTL
3.3V R
S-814A
VDD33
Q233
DASW33V
Q240
DASW5V
DALMON
BSENS1
SWVDD
VDCONT
DALMON
DDCCTL
SYSPW5


B KEYBOARD UNIT
K POWER SUPPLY UNIT
Q662
Q654
Q651
FU651
Q659
ILMBW
LSWVDD5
VDD33
ILMB2
ILMB1
BKLT
LSWVDD
SWD33
REM
G→KEY
KEY→G
RESET
DSENS
KEYIN
ROT0
ROT1
CN651
CN7401
ILMBR
SWVDD
SWD33
RESET
IC7002
BD4834G
REMOTE CONTROL SENSOR
IC7003
SBX3050-01
OPT IN
X7001
8.18MHz
COM0-7, SEG1-55
LCD
Sub LCD Back light
LED DRIVER
Q7151
Rotary Volume & Joystick ILLUMINATION
KEY MATRIX
S7101-7103
Key ILLUMINATION
LCD DRIVER/ KEY CONTROLLER
IC7001
PD2073A
RXD
TXD
XOUT
XIN
/RESET
/DIM
/KST1
/KST2
/KDT0
/KDT1
/KDT2
NC9
V4
V3
V2
V1
/ADJ
S7401
RESET
LED SWITCH
Q7202,7203
Q7205,7206
Q7201, Q7204
S7106
JOYSTICK
S7104
EJECT
Q7001
SOURCE & VOLUME
S7105
Rear On Key ILLUMINATION
A (1/2)
DSPVDD
5K_TO_G
HASENS
3G_TO_K
5G_TO_KEY
FTS1
ILL MUTE
Q234
ILL SENSE
Q238
ACC SENSE
Q235
BACKUP SENSE
Q245
CN232
TELIN
ILM
ACC
B.U
GND
Q239
Q244
Q236
Q242
Q246
Q107
VDD5.6V
BU
CN231
MSVD8V
MSVD8
MSVCC5
REG48V
DD4V
DD6V
DD2V
DD18V
Q241
Q247
ILMBW
ILMBR
Q660
Q663
VIDEO9V
VDD5V
VDD54V
3.3V REGULATOR
IC234
S-814A33AMC-BCX
Q233
Q240
ROM14V
EEPROM
BSEN
DALMON
VDCONT
DDCCTL
SYSPW5
SYSPW
FU232
FU233
DGND
PGND
CN7751
(8.2V)
FU7602
Q7601
DC/DC CONVERTER
IC7601
BP5451-1
CH1DRIVE
CH1CTL
SENSE1
CH2DRIVE
CH2CTL
SENSE2
VIN
CH1DISCH
CH2DISCH
SW
FRQSW
FU7601
CN7501
BUP-IN
BUP-OUT
BUP
(5.2V)
FU7603
Q7602
REG4.8V REGULATOR
IC7751
BA00DD0WHFP
(6.3V)
FU7702
Q7701
IC7701
BP5451-1
FU7701
(2.2V)
FU7703
Q7702
Q7751
VIDEO9V REGULATOR
IC7851
BA00CC0WFP
(9.2V)
VDD5.4V REGULATOR
IC7801
S-812C54AUA-C3I
(5.4V)
FU7801
Q7801
Q7802
4.4V REGULATOR
Q7901
(4.4V)
FU7901
Q7902
BSENS
CN7752
OUTERGND

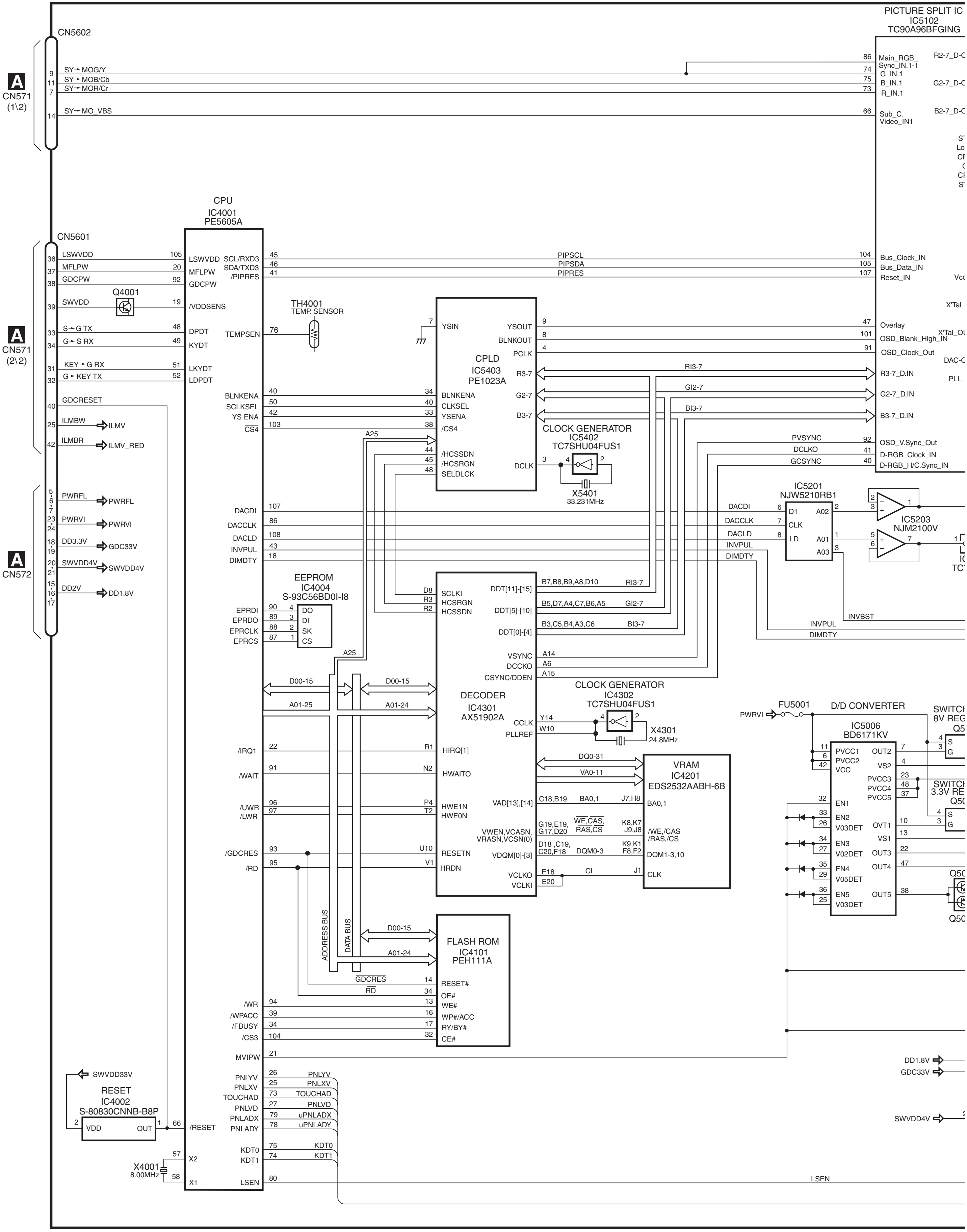
D DVD CORE UNIT



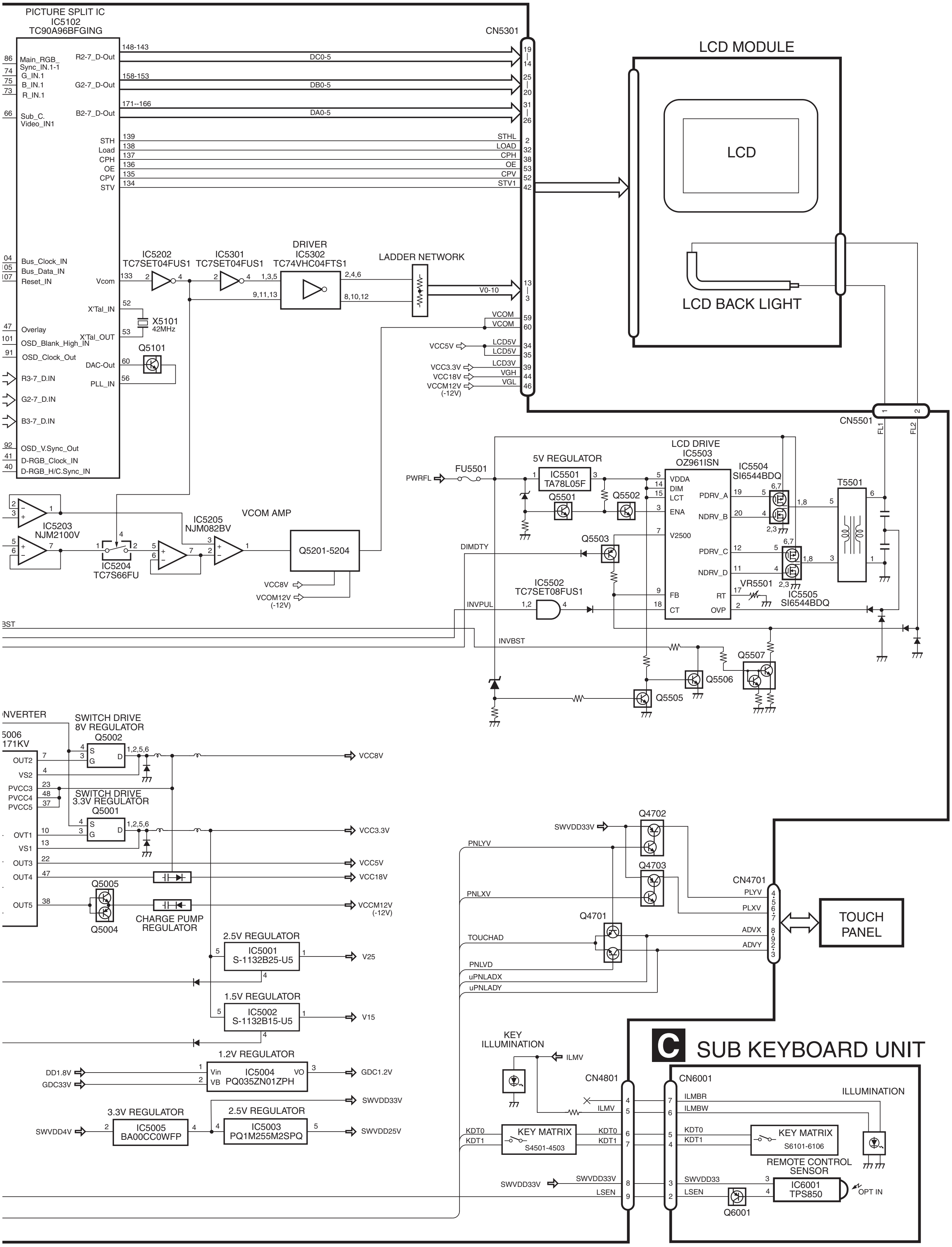
NRES
VIDEO+AUDIO
IC1501
MN2DS0016AAUB
AUD
LATCH
IC1352
TC74LCX16373FT
A0-15
AD0-15
A16-19
1LE
2LE
48
25
4
1
2
XCSSR
XCSFM
77
51
IC1351
TC7SZ08FU
FLASH 16M
IC1401
CWW1434
CE
WE
26
11
XWR1
62
IC1402
CWW1435
IC1403
TC7SZ32FU
XWR2
12
RESET
OE
28
XRD
50
101
NRST
XCSSR
NEXCE
NEXWE
NEXOE
SRCK
ADOUT3
LRCK
SDODAC
SCKDAC
LTDAC
DACCK
ADOUT0
ADOUT1
ADOUT2
174
175
173
91
90
74
172
178
177
176
DACCLK
OSCO
OSCI
169
170
X1501
Cr
Cb
Y
Comp
STANDBY
SLVSTS
HOSTCMD
IRQPWR
AMUTE
DSCSNS
PHOTOSNS
EMPH
BMUTE
IECOUT
152
153
154
161
78
79
80
89
87
147
144
75
86
179
(CR)
(CB)
(Y)
(COMPOSIT)
CR
CB
Y
COMPOSIT
STANBY
STSCOMN
CMDCOMN
RIPP
76
CONT2
CONT1
DRV3
DRV2
MD
LOADIN
FG
FD
TD
85
84
95
96
97
93
99
150
149
LDIN
CLAMP
94
SDRAM
IC1481
EDS1232AATA-75
MA0-11
MDQ0-31
DQM0-3
BA0
BA1
WE
CAS
RAS
CS
CLK
22
23
17
18
19
20
68
XWE
XCAS
XRAS
XCSM
MCK
8
10
3
4
5
6
234
232
NWE
NCAS
NRAS
NCSM
MCK
MCKI
VOLTAGE DETECT
IC1003
S-80859CNNB-B9K
VD8
VDD
OUT
VSENS
88
VSENCE
CN1951
DEBUG
PR_A20
EXTRG1_SPD_SW
SCLOCK
SDATA
EXTRG0
TRCCLK
TRCD0
TRCD1
TRCD2
TRCD3
TRCST
VCC33
92
189
192
191
190
188
187
186
185
184
183
P0
EXTRG1
SCLOCK
SDATA
EXTRG0
TRCCLK
TRCDATA0
TRCDATA1
TRCDATA2
TRCDATA3
TRCST
HOME
TEMP
VIN2RF
VIN2
VIN1RF
VIN1
VIN3RF
VIN3
VIN4RF
VIN4
VIN5
VIN6
CDMPD
DVDMPD
RFINN
F+H_G+H
E+G_E+F
LPCO2
LPCO1
98
145
122
142
123
143
121
140
120
141
136
137
130
128
116
134
135
131
129
B
A
C
D
FE1
FE2
RF
SRCK
ADOUT3
LRCK
SDODAC
SCKDAC
LTDAC
DACCLK
TC74
ADOUT0
ADOUT1
ADOUT2
TC74
ADOUT3
LRCK
TC7
VD

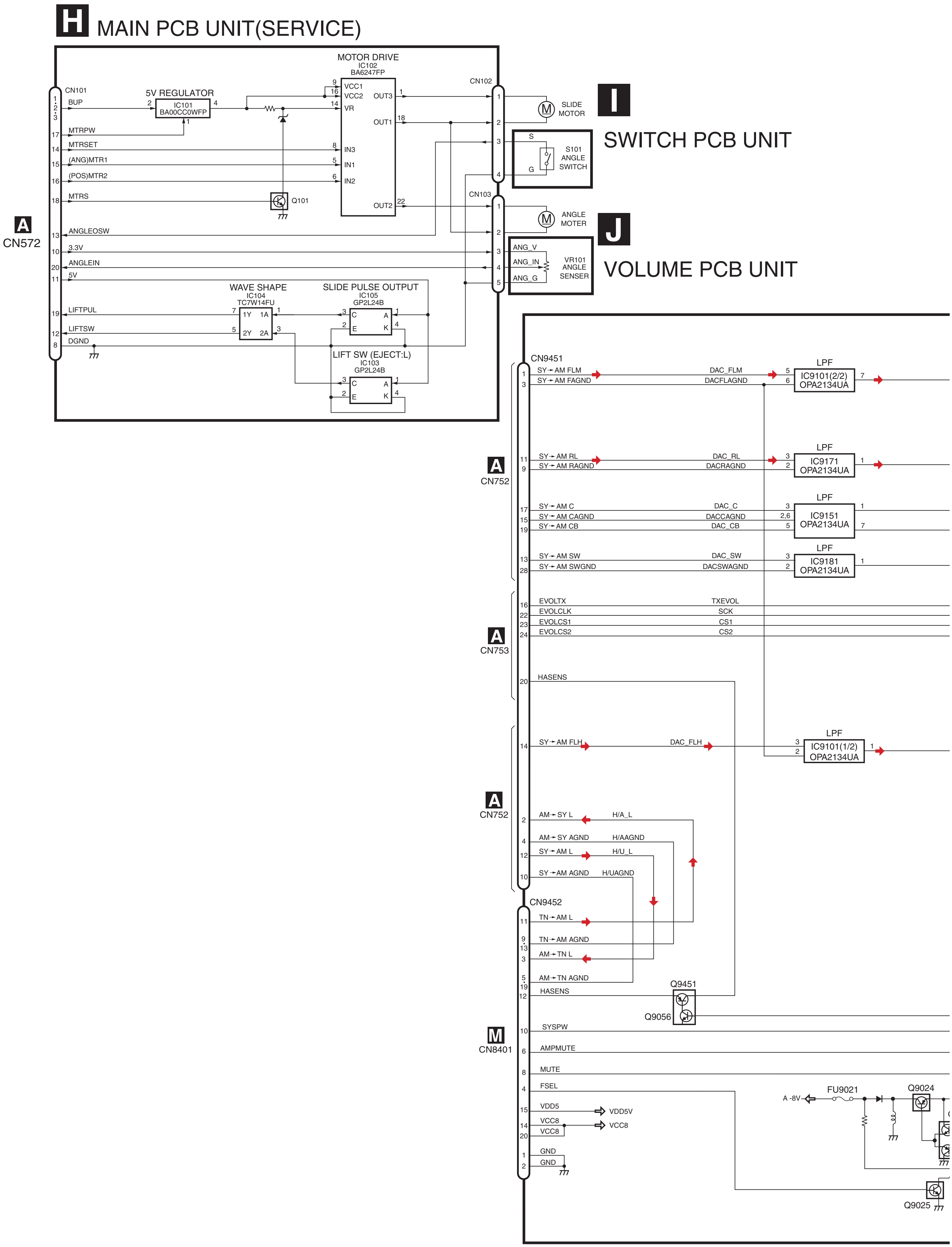

AUDIO 2CH ANALOG OUT
IC1801
PCM1753DBQ
SRCK
ADOUT3
LRCK
SDODAC
SCKDAC
LTDAC
DACCLK
BCK
DATA
LRCK
MD
MC
ML
SCK
VOUTL
IC1851
TC74VHC125FTS1
SR
ADOUT0
AD0(SUBC)
ADOUT1
AD1(BLK)
ADOUT2
AD2(CLD)
IC1852
TC74VHC125FTS1
AD3(DATA)
LR
IC1853
TC7SH08FUS1
MCKENA
RIPP
VCC5 REG.
IC1004
NJM2880U1-05
VCC5
VOUT
VIN
CONT
AVCC5 REG.
IC1005
S-L2980A50MC-C7J
AVCC5
ON/OFF
CN1901
NRES
XRESET
LOUT
ANALOG LOUT
CR
CB
Y
COMPOSIT
STANBY
STSCOMN
SLVSTS
CMDCOMN
HSTCMD
IRQPWR
AMUTE
VDD5
FU1901
VD5
VD8
WAKE UP
A
CN702
E
COMPOUND UNIT(A)
DISC DET
IC1301
TC7SZ125FU
CN1301
DiscDetect
DSCSNS
8cm
12cm
Photo
PHOTOSNS
DISC SENS
S1203
S1204
S1202
S1201
S1205
Q1299
CN1851
EMPH
BMUTE
IECOUT
SBCK
CN701
F
COMPOUND UNIT(B)
CLAMP1
TP1 CLAMP
S1206
MOTOR DRIVER
IC1201
BD7996EFV
CN1201
CONT2
CONT1
DRV3
DRV2
MD
FD
TD
CTL2
CTL1
SLIN2
SLIN1
SPIN
LDIN
FG
ACTIN1
ACTIN2
SLO2-
SLO1-
SLO2+
SLO1+
V
W
U
HB
HW-
HW+
HV-
HV+
HU-
HU+
ACO1-
ACO1+
ACO2+
ACO2-
B-
A-
B+
A+
COILV
COIL_V
COILW
COIL_W
COILU
COIL_U
HBM
HALL_BIAS-
HWM
HALL_W-
HWP
HALL_W+
HVM
HALL_V-
HVP
HALL_V+
HUM
HALL_U-
HUP
HALL_U+
HALL_BIAS+
HOME
SWITCH
FOM
FOP
TOM
TOP
CN1101
F-
F+
T-
T+
TEMP
TH
B
A
C
D
FE1
FE2
CDMPD
78MD
DVDMPD
65MD
RF
F+H_G+H
F+H/G+H
E+G_E+F
E+G/E+F
PU (DP8)
Q1102
Q1104
LPCO2
LD(CD)
Q1101
Q1103
LPCO1
LD(DVD)
VREF
VCC5
VCC
3.3V REG.
IC1007
NJM2885DL1-33
IN
OUT
VCC33
1.2V REG.
IC1008
R1232D121B
VIN
VDD
LX
VCC12

G MONITOR UNIT



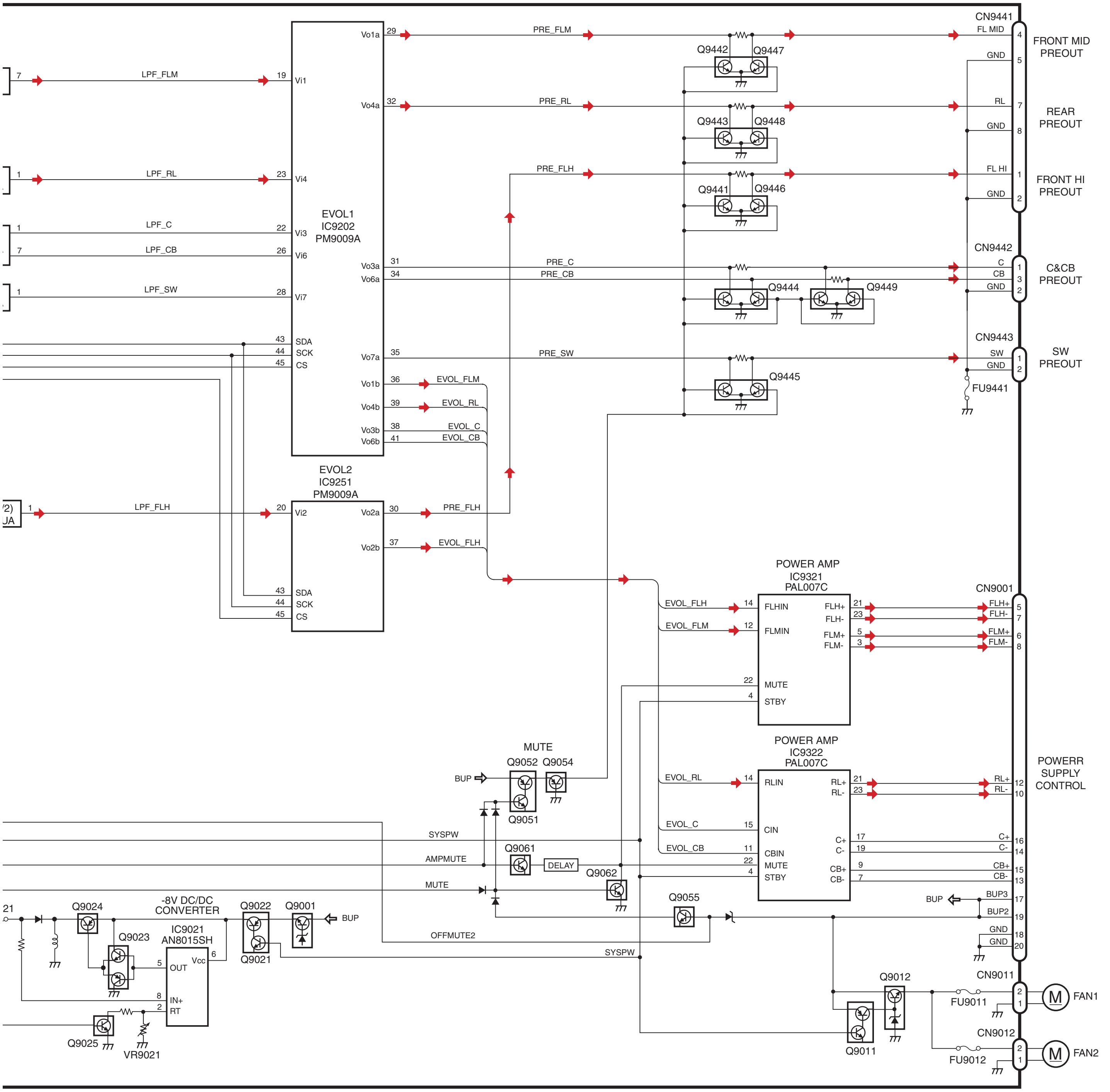
PICTURE SPLIT IC
IC5102
TC90A96BFGING
CN5602
A
CN571 (1\2)
SY→MOG/Y
SY→MOB/Cb
SY→MOR/Cr
SY→MO_VBS
Main_RGB_Sync_IN.1-1
G_IN.1
B_IN.1
R_IN.1
Sub_C.Video_IN1
R2-7_D-C
G2-7_D-C
B2-7_D-C
CPU
IC4001
PE5605A
CN5601
LSWVDD
MFLPW
GDCPW
Q4001
SWVDD
S→G TX
G←S RX
A
CN571 (2\2)
KEY→G RX
G←KEY TX
GDCRESET
ILMBW
ILMV
ILMBR
ILMV_RED
PWRFL
PWRVI
DD3.3V
GDC33V
SWVDD4V
DD2V
DD1.8V
A
CN572
SCL/RXD3
SDA/TXD3
/PIPRES
/VDDSENS
DPDT
KYDT
LKYDT
LDPDT
TEMPSEN
TH4001
TEMP. SENSOR
PIPSCL
PIPSDA
PIPRES
Bus_Clock_IN
Bus_Data_IN
Reset_IN
X'Tal_
Overlay
OSD_Blank_High_IN
OSD_Clock_Out
R3-7_D.IN
G2-7_D.IN
B3-7_D.IN
OSD_V.Sync_Out
D-RGB_Clock_IN
D-RGB_H/C.Sync_IN
CPLD
IC5403
PE1023A
YSIN
YSOUT
BLNKOUT
PCLK
R3-7
G2-7
B3-7
BLNKENA
CLKSEL
YSENA
/CS4
/HCSSDN
/HCSRGN
SELDLCK
DCLK
RI3-7
GI2-7
BI3-7
CLOCK GENERATOR
IC5402
TC7SHU04FUS1
X5401
33.231MHz
PVSYNC
DCLKO
GCSYNC
IC5201
NJW5210RB1
DACDI
DACCLK
DACLD
INVPUL
DIMDTY
D1
CLK
LD
A02
A01
A03
IC5203
NJM2100V
INVBST
EEPROM
IC4004
S-93C56BD0I-I8
EPRDI
EPRDO
EPRCLK
EPRCS
DO
DI
SK
CS
DECODER
IC4301
AX51902A
SCLKI
HCSRGN
HCSSDN
DDT[11]-[15]
DDT[5]-[10]
DDT[0]-[4]
B7,B8,B9,A8,D10
B5,D7,A4,C7,B6,A5
B3,C5,B4,A3,C6
VSYNC
DCCKO
CSYNC/DDEN
A14
A6
A15
D00-15
A01-25
A01-24
A25
CLOCK GENERATOR
IC4302
TC7SHU04FUS1
X4301
24.8MHz
CCLK
PLLREF
Y14
W10
HIRQ[1]
HWAITO
HWE1N
HWE0N
RESETN
HRDN
VAD[13],[14]
VWEN,VCASN,VRASN,VCSN(0)
VDQM[0]-[3]
VCLKO
VCLKI
DQ0-31
VA0-11
BA0,1
WE,CAS,RAS,CS
DQM0-3
CL
VRAM
IC4201
EDS2532AABH-6B
/WE,/CAS
/RAS,/CS
DQM1-3,10
CLK
/IRQ1
/WAIT
/UWR
/LWR
/GDCRES
/RD
ADDRESS BUS
DATA BUS
FLASH ROM
IC4101
PEH111A
GDCRES
RD
RESET#
OE#
WE#
WP#/ACC
RY/BY#
CE#
/WR
/WPACC
/FBUSY
/CS3
MVIPW
PWRVI
FU5001
D/D CONVERTER
IC5006
BD6171KV
PVCC1
PVCC2
VCC
PVCC3
PVCC4
PVCC5
OUT2
VS2
EN1
EN2
V03DET
EN3
V02DET
EN4
V05DET
EN5
V03DET
OVT1
VS1
OUT3
OUT4
OUT5
SWITC
8V REG
SWITC
3.3V RE
SWVDD33V
RESET
IC4002
S-80830CNNB-B8P
VDD
OUT
/RESET
X4001
8.00MHz
X2
X1
PNLYV
PNLXV
TOUCHAD
PNLVD
PNLADX
PNLADY
uPNLADX
uPNLADY
KDT0
KDT1
LSEN
DD1.8V
GDC33V
SWVDD4V


PICTURE SPLIT IC
IC5102
TC90A96BFGING
Main_RGB_Sync_IN.1-1
G_IN.1
B_IN.1
R_IN.1
Sub_C.Video_IN1
R2-7_D-Out
G2-7_D-Out
B2-7_D-Out
148-143
158-153
171--166
DC0-5
DB0-5
DA0-5
STH
Load
CPH
OE
CPV
STV
STHL
LOAD
CPH
OE
CPV
STV1
CN5301
LCD MODULE
LCD
LCD BACK LIGHT
Bus_Clock_IN
Bus_Data_IN
Reset_IN
Vcom
X'Tal_IN
X'Tal_OUT
Overlay
OSD_Blank_High_IN
OSD_Clock_Out
DAC-Out
PLL_IN
R3-7_D.IN
G2-7_D.IN
B3-7_D.IN
OSD_V.Sync_Out
D-RGB_Clock_IN
D-RGB_H/C.Sync_IN
IC5202
TC7SET04FUS1
IC5301
TC7SET04FUS1
DRIVER
IC5302
TC74VHC04FTS1
LADDER NETWORK
V0-10
X5101
42MHz
Q5101
VCOM
VCOM
VCC5V
LCD5V
LCD5V
LCD3V
VCC3.3V
VCC18V
VCCM12V
(-12V)
VGH
VGL
CN5501
FL1
FL2
IC5203
NJM2100V
IC5204
TC7S66FU
IC5205
NJM082BV
VCOM AMP
Q5201-5204
VCC8V
VCOM12V
(-12V)
BST
PWRFL
FU5501
5V REGULATOR
IC5501
TA78L05F
Q5501
Q5502
LCD DRIVE
IC5503
OZ961ISN
VDDA
DIM
LCT
ENA
V2500
FB
CT
PDRV_A
NDRV_B
PDRV_C
NDRV_D
RT
OVP
IC5504
SI6544BDQ
IC5505
SI6544BDQ
T5501
VR5501
DIMDTY
Q5503
INVPUL
IC5502
TC7SET08FUS1
INVBST
Q5505
Q5506
Q5507
INVERTER
5006
171KV
OUT2
VS2
PVCC3
PVCC4
PVCC5
OVT1
VS1
OUT3
OUT4
OUT5
SWITCH DRIVE
8V REGULATOR
Q5002
SWITCH DRIVE
3.3V REGULATOR
Q5001
Q5005
Q5004
CHARGE PUMP
REGULATOR
VCC8V
VCC3.3V
VCC5V
VCC18V
VCCM12V
(-12V)
2.5V REGULATOR
IC5001
S-1132B25-U5
V25
1.5V REGULATOR
IC5002
S-1132B15-U5
V15
1.2V REGULATOR
IC5004
PQ035ZN01ZPH
Vin
VB
VO
DD1.8V
GDC33V
GDC1.2V
SWVDD33V
3.3V REGULATOR
IC5005
BA00CC0WFP
2.5V REGULATOR
IC5003
PQ1M255M2SPQ
SWVDD4V
SWVDD25V
SWVDD33V
Q4702
Q4703
Q4701
PNLYV
PNLXV
TOUCHAD
PNLVD
uPNLADX
uPNLADY
CN4701
PLYV
PLXV
ADVX
ADVY
TOUCH
PANEL
KEY
ILLUMINATION
ILMV
CN4801
ILMV
KDT0
KDT1
KEY MATRIX
S4501-4503
SWVDD33V
LSEN
C
SUB KEYBOARD UNIT
CN6001
ILMBR
ILMBW
ILLUMINATION
KEY MATRIX
S6101-6106
REMOTE CONTROL
SENSOR
IC6001
TPS850
OPT IN
SWVDD33
LSEN
Q6001
A
B
C
D
E
F

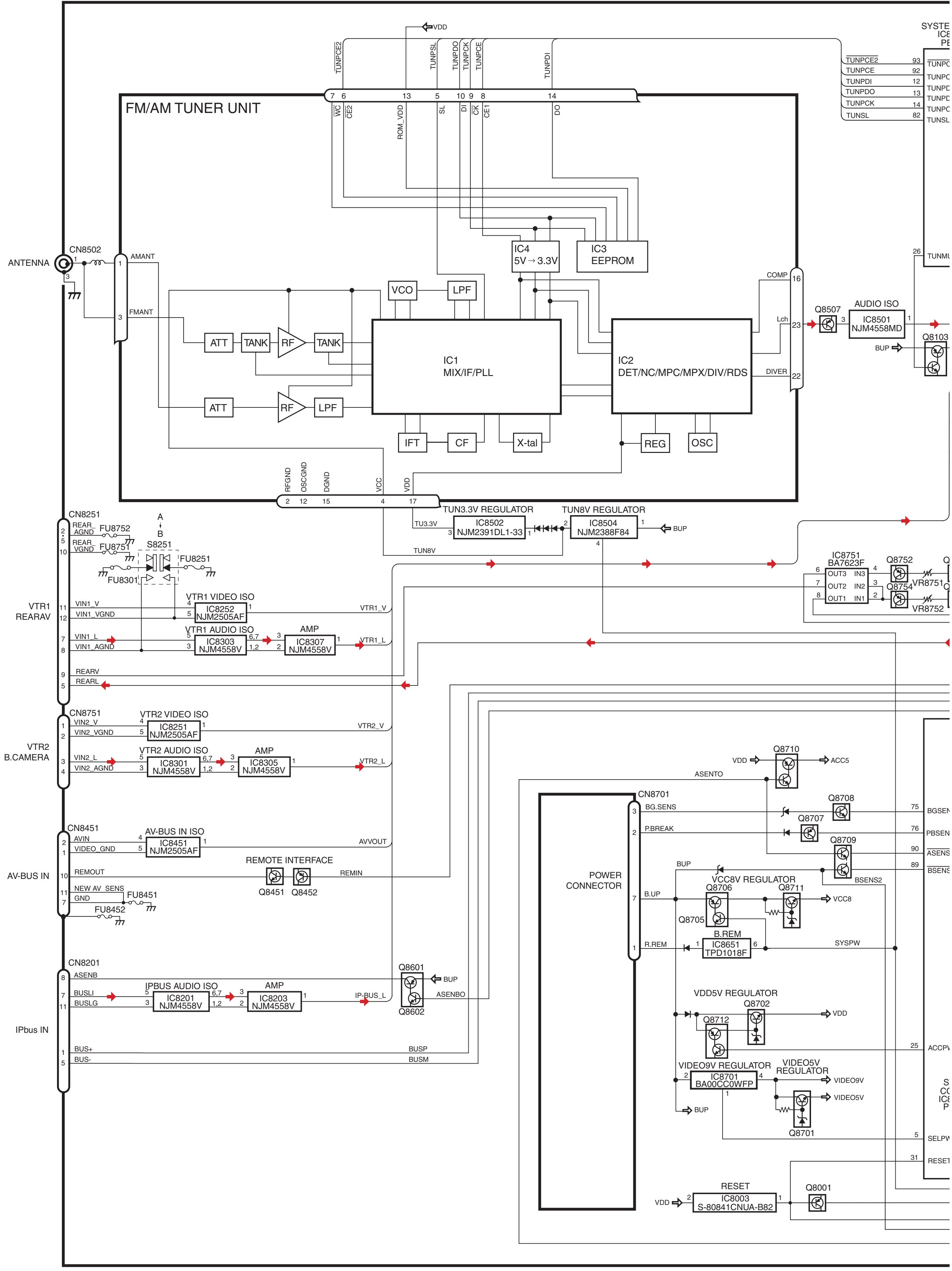


H
MAIN PCB UNIT(SERVICE)
A
CN572
CN101
BUP
MTRPW
MTRSET
(ANG)MTR1
(POS)MTR2
MTRS
ANGLEOSW
3.3V
ANGLEIN
5V
LIFTPUL
LIFTSW
DGND
5V REGULATOR
IC101
BA00CC0WFP
Q101
MOTOR DRIVE
IC102
BA6247FP
VCC1
VCC2
VR
IN3
IN1
IN2
OUT3
OUT1
OUT2
CN102
CN103
WAVE SHAPE
IC104
TC7W14FU
1Y 1A
2Y 2A
SLIDE PULSE OUTPUT
IC105
GP2L24B
LIFT SW (EJECT:L)
IC103
GP2L24B
C A E K
SLIDE MOTOR
I
SWITCH PCB UNIT
S
G
S101
ANGLE
SWITCH
ANGLE MOTER
J
VOLUME PCB UNIT
ANG_V
ANG_IN
ANG_G
VR101
ANGLE
SENSER
CN9451
SY→AM FLM
SY→AM FAGND
DAC_FLM
DACFLAGND
LPF
IC9101(2/2)
OPA2134UA
A
CN752
SY→AM RL
SY→AM RAGND
DAC_RL
DACRAGND
LPF
IC9171
OPA2134UA
SY→AM C
SY→AM CAGND
SY→AM CB
DAC_C
DACCAGND
DAC_CB
LPF
IC9151
OPA2134UA
SY→AM SW
SY→AM SWGND
DAC_SW
DACSWAGND
LPF
IC9181
OPA2134UA
EVOLTX
EVOLCLK
EVOLCS1
EVOLCS2
TXEVOL
SCK
CS1
CS2
A
CN753
HASENS
SY→AM FLH
DAC_FLH
LPF
IC9101(1/2)
OPA2134UA
A
CN752
AM→SY L
AM→SY AGND
SY→AM L
SY→AM AGND
H/A_L
H/AAGND
H/U_L
H/UAGND
CN9452
TN→AM L
TN→AM AGND
AM→TN L
AM→TN AGND
HASENS
Q9451
Q9056
M
CN8401
SYSPW
AMPMUTE
MUTE
FSEL
VDD5
VCC8
VCC8
GND
GND
VDD5V
VCC8
A -8V
FU9021
Q9024
Q9025

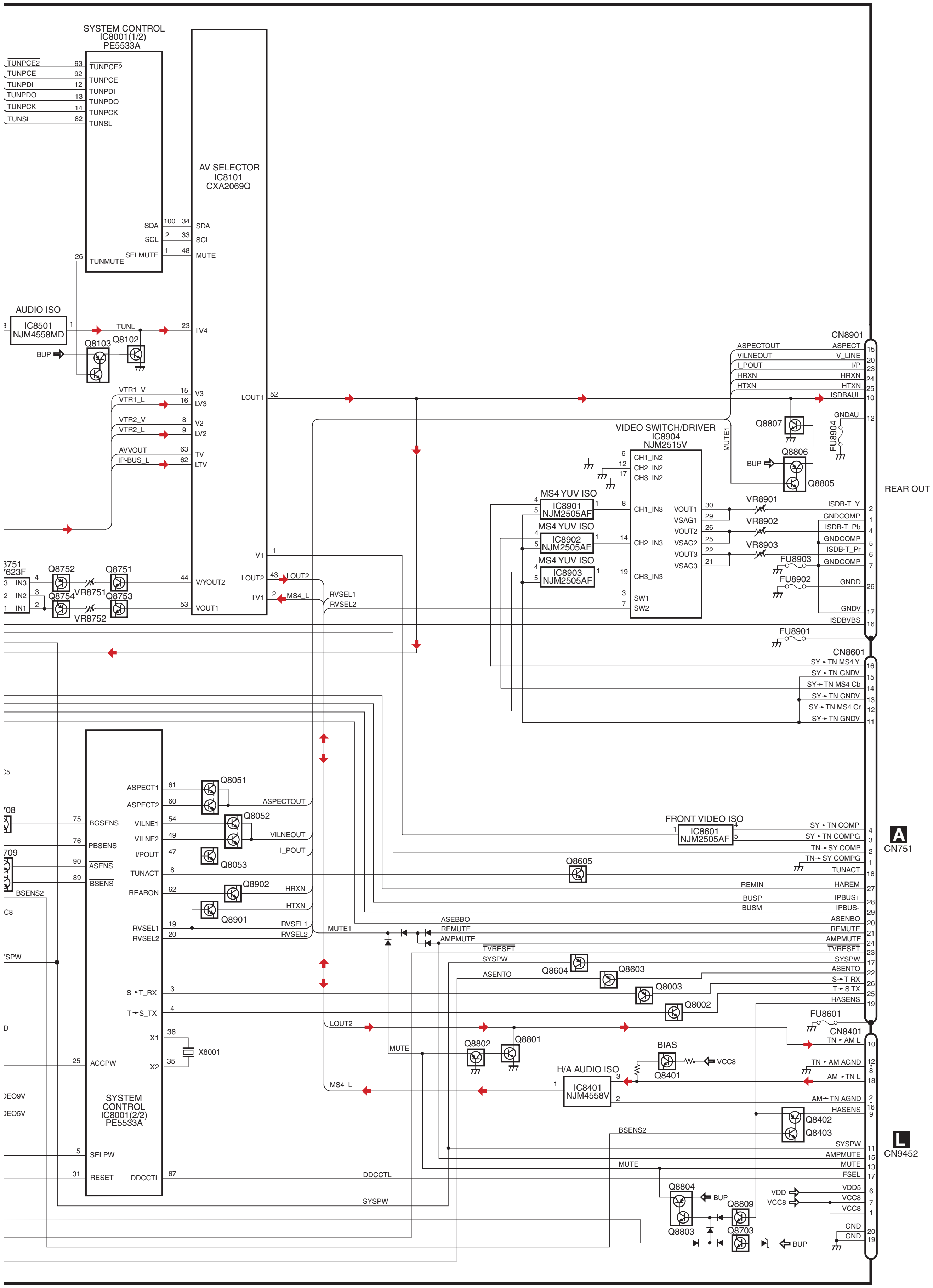
L AMP UNIT


CN9441
FL MID
GND
RL
GND
FL HI
GND
FRONT MID PREOUT
REAR PREOUT
FRONT HI PREOUT
CN9442
C
CB
GND
C&CB PREOUT
CN9443
SW
GND
SW PREOUT
FU9441
Q9442
Q9447
Q9443
Q9448
Q9441
Q9446
Q9444
Q9449
Q9445
PRE_FLM
PRE_RL
PRE_FLH
PRE_C
PRE_CB
PRE_SW
LPF_FLM
LPF_RL
LPF_C
LPF_CB
LPF_SW
LPF_FLH
EVOL1
IC9202
PM9009A
Vi1
Vi4
Vi3
Vi6
Vi7
SDA
SCK
CS
Vo1a
Vo4a
Vo3a
Vo6a
Vo7a
Vo1b
Vo4b
Vo3b
Vo6b
EVOL_FLM
EVOL_RL
EVOL_C
EVOL_CB
EVOL2
IC9251
PM9009A
Vi2
Vo2a
Vo2b
PRE_FLH
EVOL_FLH
POWER AMP
IC9321
PAL007C
FLHIN
FLMIN
MUTE
STBY
FLH+
FLH-
FLM+
FLM-
CN9001
POWER AMP
IC9322
PAL007C
RLIN
CIN
CBIN
MUTE
STBY
RL+
RL-
C+
C-
CB+
CB-
POWERR SUPPLY CONTROL
BUP3
BUP2
GND
GND
BUP
MUTE
Q9052
Q9054
Q9051
BUP
SYSPW
AMPMUTE
MUTE
Q9061
DELAY
Q9062
Q9055
OFFMUTE2
SYSPW
-8V DC/DC CONVERTER
IC9021
AN8015SH
OUT
Vcc
IN+
RT
Q9024
Q9023
Q9022
Q9021
Q9001
BUP
Q9025
VR9021
Q9012
Q9011
CN9011
FU9011
FAN1
CN9012
FU9012
FAN2
M

M TUNER SELECTOR UNIT

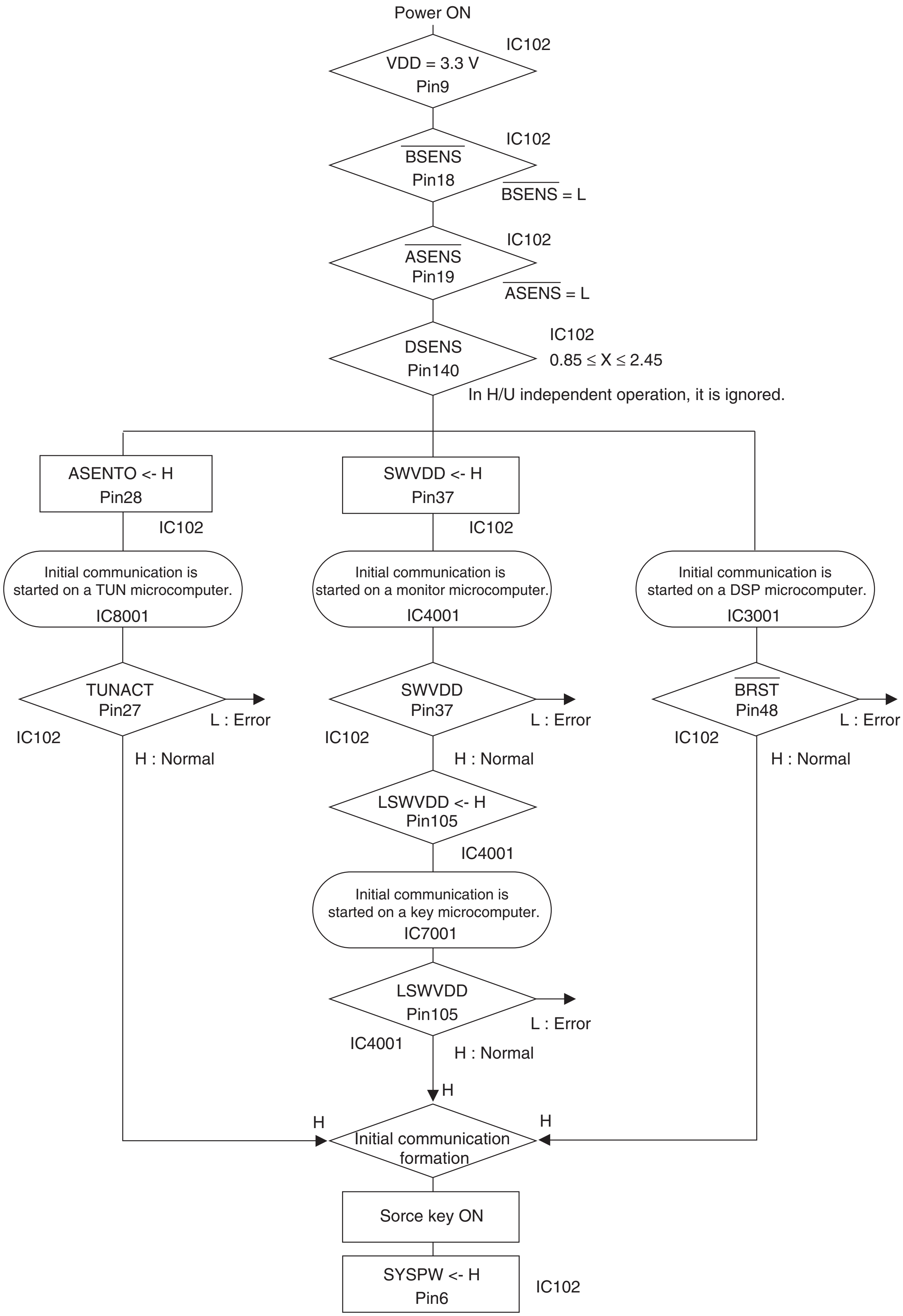


A
B
C
D
E
F
VDD
TUNPCE2
TUNPSL
TUNPDO
TUNPCK
TUNPCE
TUNPDI
SYSTE
IC8
PE
TUNPCE2 93
TUNPCE 92
TUNPDI 12
TUNPDO 13
TUNPCK 14
TUNSL 82
FM/AM TUNER UNIT
WC
CE2
ROM_VDD
SL
DI
CK
CE1
DO
IC4 5V→3.3V
IC3 EEPROM
ANTENNA
CN8502
AMANT
FMANT
VCO
LPF
ATT
TANK
RF
IC1 MIX/IF/PLL
IC2 DET/NC/MPC/MPX/DIV/RDS
COMP
Lch
DIVER
IFT
CF
X-tal
REG
OSC
26
TUNMU
Q8507
AUDIO ISO
IC8501 NJM4558MD
BUP
Q8103
RFGND
OSCGND
DGND
VCC
VDD
TUN3.3V REGULATOR
IC8502 NJM2391DL1-33
TU3.3V
TUN8V REGULATOR
IC8504 NJM2388F84
TUN8V
CN8251
REAR_AGND
REAR_VGND
FU8752
FU8751
S8251
FU8251
FU8301
VTR1 REARAV
VIN1_V
VIN1_VGND
VTR1 VIDEO ISO
IC8252 NJM2505AF
VTR1_V
VIN1_L
VIN1_AGND
VTR1 AUDIO ISO
IC8303 NJM4558V
AMP
IC8307 NJM4558V
VTR1_L
REARV
REARL
IC8751 BA7623F
OUT3 IN3
OUT2 IN2
OUT1 IN1
Q8752
Q8754
VR8751
VR8752
CN8751
VTR2 B.CAMERA
VIN2_V
VIN2_VGND
VTR2 VIDEO ISO
IC8251 NJM2505AF
VTR2_V
VIN2_L
VIN2_AGND
VTR2 AUDIO ISO
IC8301 NJM4558V
IC8305 NJM4558V
VTR2_L
CN8451
AV-BUS IN
AVIN
VIDEO_GND
AV-BUS IN ISO
IC8451 NJM2505AF
AVVOUT
REMOTE INTERFACE
REMOUT
REMIN
Q8451
Q8452
NEW AV_SENS
GND
FU8451
FU8452
CN8201
IPbus IN
ASENB
BUSLI
BUSLG
IPBUS AUDIO ISO
IC8201 NJM4558V
IC8203 NJM4558V
IP-BUS_L
Q8601
Q8602
ASENBO
BUS+
BUS-
BUSP
BUSM
Q8710
ACC5
ASENTO
CN8701
POWER CONNECTOR
BG.SENS
P.BREAK
Q8708
Q8707
Q8709
75 BGSEN
76 PBSEN
90 ASENS
89 BSENS
BSENS2
B.UP
VCC8V REGULATOR
Q8706
Q8711
Q8705
VCC8
B.REM
IC8651 TPD1018F
R.REM
SYSPW
VDD5V REGULATOR
Q8702
Q8712
25 ACCPW
VIDEO9V REGULATOR
IC8701 BA00CC0WFP
VIDEO5V REGULATOR
VIDEO9V
VIDEO5V
Q8701
5 SELPW
31 RESET
RESET
IC8003 S-80841CNUA-B82
Q8001


SYSTEM CONTROL
IC8001(1/2)
PE5533A
TUNPCE2
TUNPCE
TUNPDI
TUNPDO
TUNPCK
TUNSL
SDA
SCL
SELMUTE
TUNMUTE
AV SELECTOR
IC8101
CXA2069Q
SDA
SCL
MUTE
LV4
V3
LV3
V2
LV2
TV
LTV
V1
V/YOUT2
LOUT1
LOUT2
LV1
VOUT1
AUDIO ISO
IC8501
NJM4558MD
TUNL
BUP
Q8103
Q8102
VTR1_V
VTR1_L
VTR2_V
VTR2_L
AVVOUT
IP-BUS_L
Q8752
Q8751
Q8754
Q8753
VR8751
VR8752
IN3
IN2
IN1
LOUT2
MS4_L
RVSEL1
RVSEL2
VIDEO SWITCH/DRIVER
IC8904
NJM2515V
CH1_IN2
CH2_IN2
CH3_IN2
CH1_IN3
CH2_IN3
CH3_IN3
SW1
SW2
VOUT1
VSAG1
VOUT2
VSAG2
VOUT3
VSAG3
MS4 YUV ISO
IC8901
NJM2505AF
MS4 YUV ISO
IC8902
NJM2505AF
MS4 YUV ISO
IC8903
NJM2505AF
VR8901
VR8902
VR8903
FU8903
FU8902
FU8901
FU8904
MUTE1
Q8807
Q8806
Q8805
CN8901
ASPECTOUT
VILNEOUT
I_POUT
HRXN
HTXN
ASPECT
V_LINE
I/P
HRXN
HTXN
ISDBAUL
GNDAU
ISDB-T_Y
GNDCOMP
ISDB-T_Pb
GNDCOMP
ISDB-T_Pr
GNDCOMP
GNDD
GNDV
ISDBVBS
REAR OUT
CN8601
SY→TN MS4 Y
SY→TN GNDV
SY→TN MS4 Cb
SY→TN GNDV
SY→TN MS4 Cr
SY→TN GNDV
ASPECT1
ASPECT2
VILNE1
VILNE2
I/POUT
TUNACT
REAREON
RVSEL1
RVSEL2
BGSENS
PBSENS
ASENS
BSENS
BSENS2
Q8051
Q8052
Q8053
Q8902
Q8901
ASPECTOUT
VILNEOUT
I_POUT
HRXN
HTXN
RVSEL1
RVSEL2
FRONT VIDEO ISO
IC8601
NJM2505AF
SY→TN COMP
SY→TN COMPG
TN→SY COMP
TN→SY COMPG
TUNACT
A
CN751
Q8605
REMIN
BUSP
BUSM
HAREM
IPBUS+
IPBUS-
MUTE1
ASEBBO
REMUTE
AMPMUTE
TVRESET
SYSPW
ASENTO
ASENBO
REMUTE
AMPMUTE
TVRESET
SYSPW
ASENTO
S→T RX
T→S TX
HASENS
Q8604
Q8603
Q8003
Q8002
S→T_RX
T→S_TX
X1
X2
X8001
ACCPW
SYSTEM
CONTROL
IC8001(2/2)
PE5533A
SELPW
RESET
DDCCTL
LOUT2
MUTE
Q8802
Q8801
MS4_L
BIAS
VCC8
Q8401
H/A AUDIO ISO
IC8401
NJM4558V
FU8601
CN8401
TN→AM L
TN→AM AGND
AM→TN L
AM→TN AGND
HASENS
Q8402
Q8403
BSENS2
SYSPW
AMPMUTE
MUTE
FSEL
L
CN9452
MUTE
Q8804
Q8803
BUP
Q8809
Q8703
VDD
VCC8
VDD5
VCC8
VCC8
GND
GND
BUP
DDCCTL
SYSPW
DEO9V
DEO5V
SPW
C8
C5
708
709
3751
623F

5. DIAGNOSIS

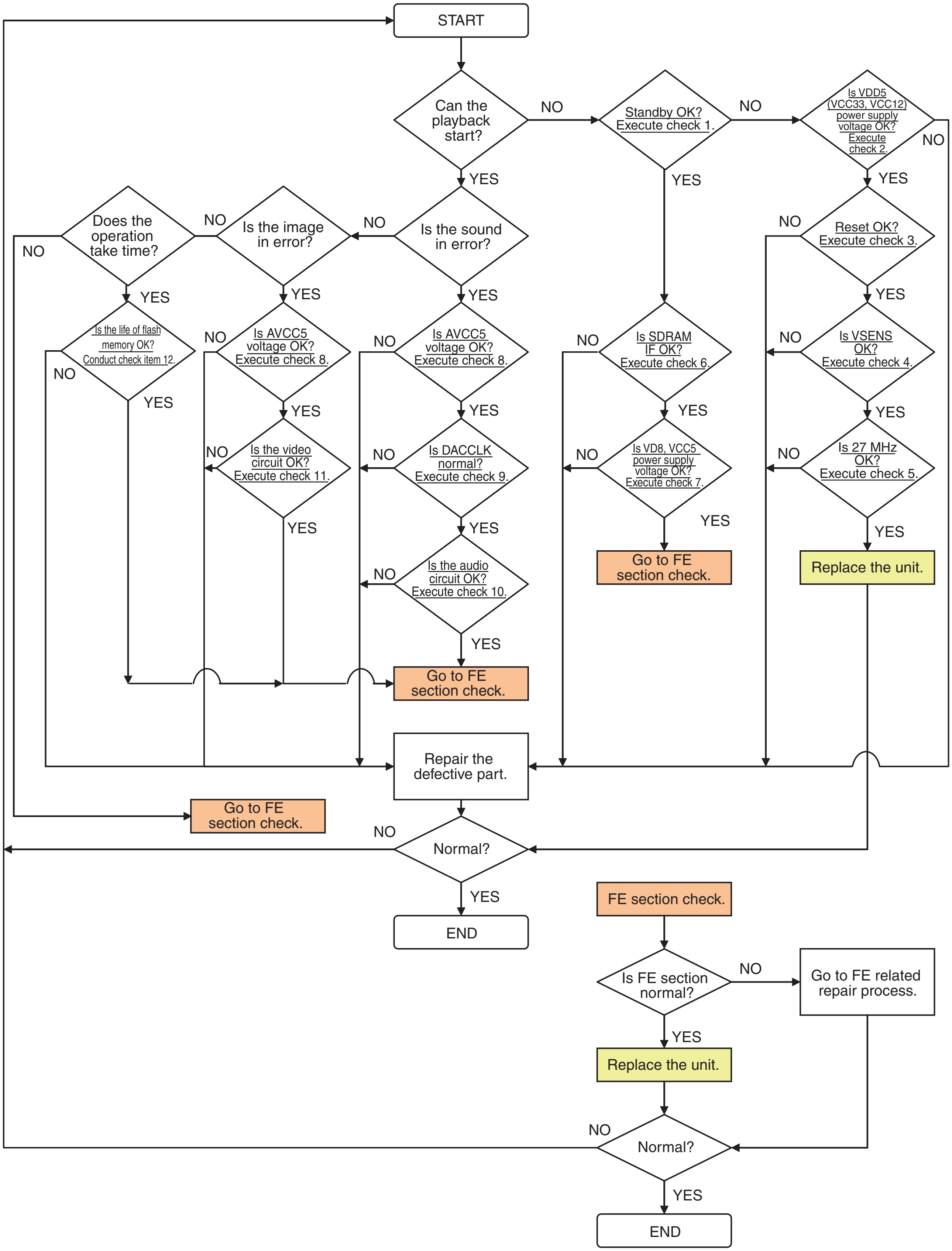
5.1 OPERATIONAL FLOWCHART



Power ON
IC102
VDD = 3.3 V
Pin9
IC102
$\overline{\text{BSENS}}$
Pin18
$\overline{\text{BSENS}}$ = L
IC102
$\overline{\text{ASENS}}$
Pin19
$\overline{\text{ASENS}}$ = L
DSENS
Pin140
IC102
0.85 ≤ X ≤ 2.45
In H/U independent operation, it is ignored.
ASENTO <- H
Pin28
IC102
SWVDD <- H
Pin37
IC102
Initial communication is started on a TUN microcomputer.
IC8001
Initial communication is started on a monitor microcomputer.
IC4001
Initial communication is started on a DSP microcomputer.
IC3001
TUNACT
Pin27
L : Error
IC102
H : Normal
SWVDD
Pin37
L : Error
IC102
H : Normal
$\overline{\text{BRST}}$
Pin48
L : Error
IC102
H : Normal
LSWVDD <- H
Pin105
IC4001
Initial communication is started on a key microcomputer.
IC7001
LSWVDD
Pin105
L : Error
IC4001
H : Normal
H
H
H
Initial communication formation
Sorce key ON
SYSPW <- H
Pin6
IC102

5.2 DIAGNOSIS FLOWCHART

BACK END section flow


START
Can the playback start?
NO
Standby OK? Execute check 1.
NO
Is VDD5 (VCC33, VCC12) power supply voltage OK? Execute check 2.
NO
YES
YES
YES
Does the operation take time?
NO
Is the image in error?
NO
Is the sound in error?
NO
Reset OK? Execute check 3.
NO
YES
YES
YES
YES
Is the life of flash memory OK? Conduct check item 12.
NO
Is AVCC5 voltage OK? Execute check 8.
NO
Is AVCC5 voltage OK? Execute check 8.
NO
Is SDRAM IF OK? Execute check 6.
NO
Is VSENS OK? Execute check 4.
NO
YES
YES
YES
YES
YES
Is the video circuit OK? Execute check 11.
NO
Is DACCLK normal? Execute check 9.
NO
Is VD8, VCC5 power supply voltage OK? Execute check 7.
NO
Is 27 MHz OK? Execute check 5.
NO
YES
YES
YES
YES
Go to FE section check.
Replace the unit.
Is the audio circuit OK? Execute check 10.
NO
YES
Go to FE section check.
Repair the defective part.
Go to FE section check.
NO
Normal?
YES
END
FE section check.
Is FE section normal?
NO
Go to FE related repair process.
YES
Replace the unit.
NO
Normal?
YES
END

Check 1: Standby OK?

<Check> Check the voltage at the "STANBY" test point while the power is on.
Use the "DGND1" test point at the reference.

NO.	Check point	Module No.	Specification value	Unit
1	STANBY-DGND1	ALL	VCC33V- 0.6 V or more	V

Side A

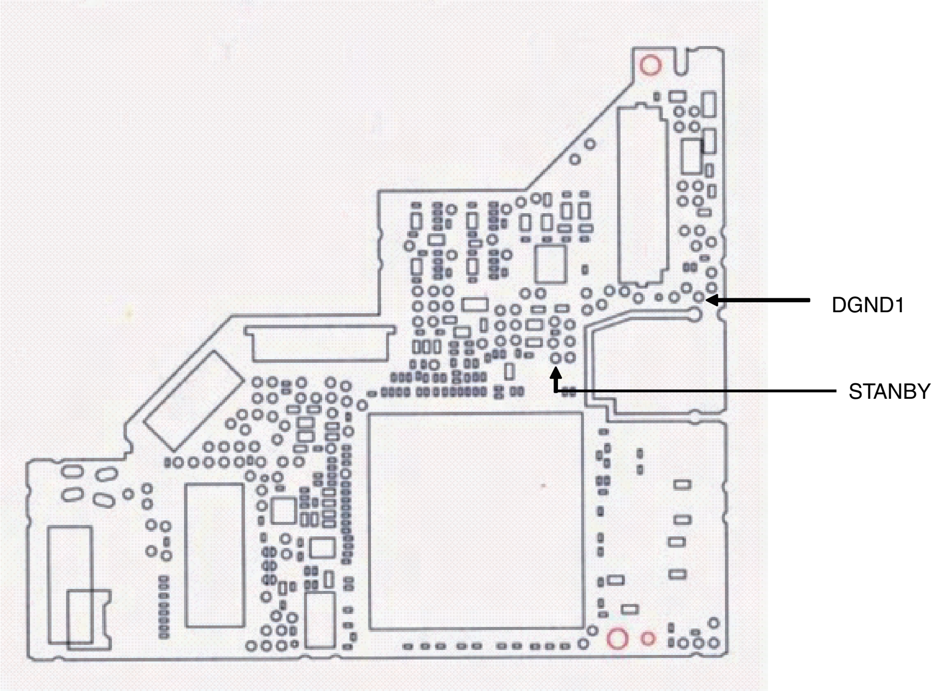


Fig 1.1: STANBY check point

Check 2: Is VDD5 (VCC33, VCC12) power supply voltage OK?

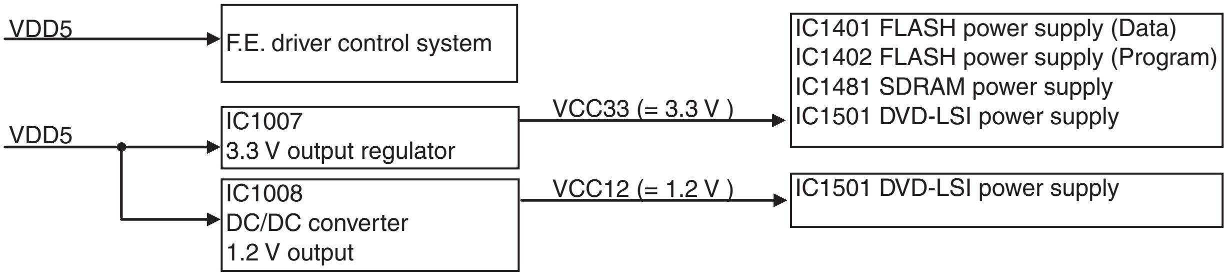

VDD5
F.E. driver control system
VDD5
IC1007
3.3 V output regulator
IC1008
DC/DC converter
1.2 V output
VCC33 (= 3.3 V)
VCC12 (= 1.2 V)
IC1401 FLASH power supply (Data)
IC1402 FLASH power supply (Program)
IC1481 SDRAM power supply
IC1501 DVD-LSI power supply
IC1501 DVD-LSI power supply

Fig 2.1: Power supply configuration

<Check> Check the voltage at the "VDD5_3, VCC33_3 and VCC12_1" test point while the power is on.
Use the "DGND1" test point at the reference.

NO.	Check point	Module No.	Specification value	Unit
1	VDD5_3 - DGND1	ALL	5.0 ± 0.4	V
2	VCC33_3 - DGND1	ALL	3.3 ± 0.15	V
3	VCC12_1 - DGND1	ALL	1.2 ± 0.12	V

Side A

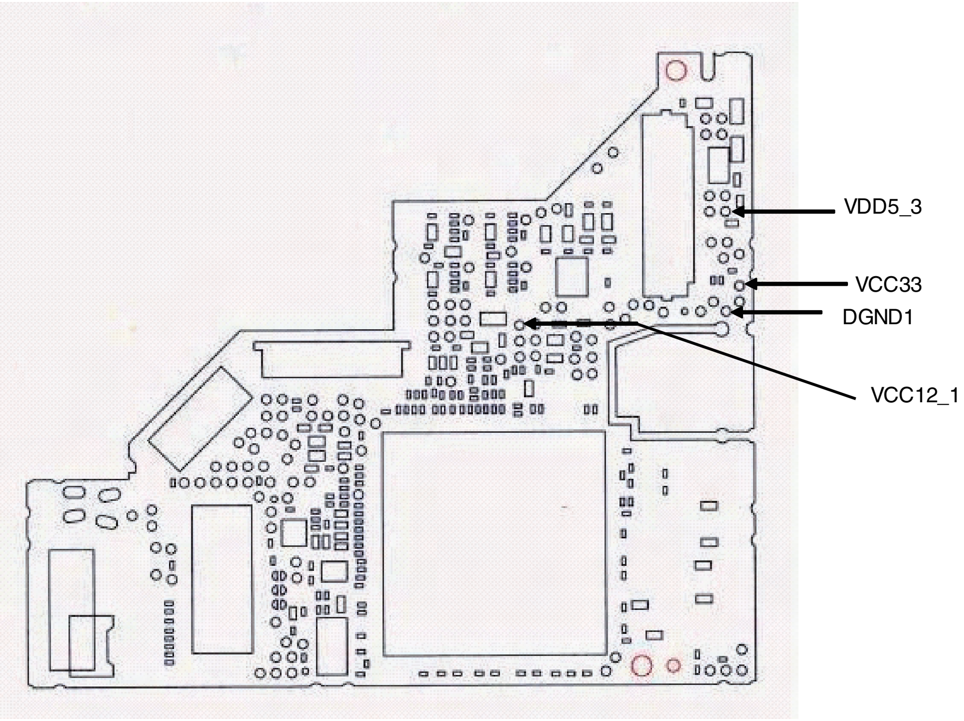

VDD5_3
VCC33
DGND1
VCC12_1

Fig 2.2: VDD5, VCC33, VCC12 voltage check points

Check 3: Reset OK?

<Check> Check the voltage at the "XRES" test point while the power is on.
Use the "DGND1" test point at the reference.

NO.	Check point	Module No.	Specification value	Unit
1	XRES-DGND1	ALL	VCC33 x 0.7 or more	V

Side A

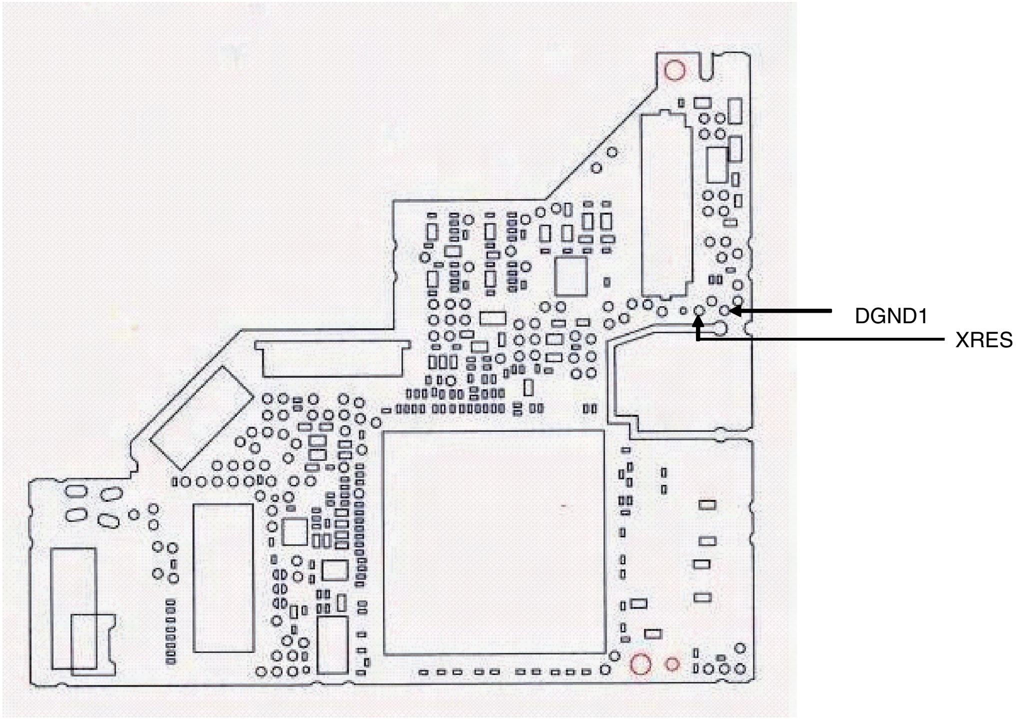


Fig 3.1: RESET check point

Check 4: Is VSENS OK?

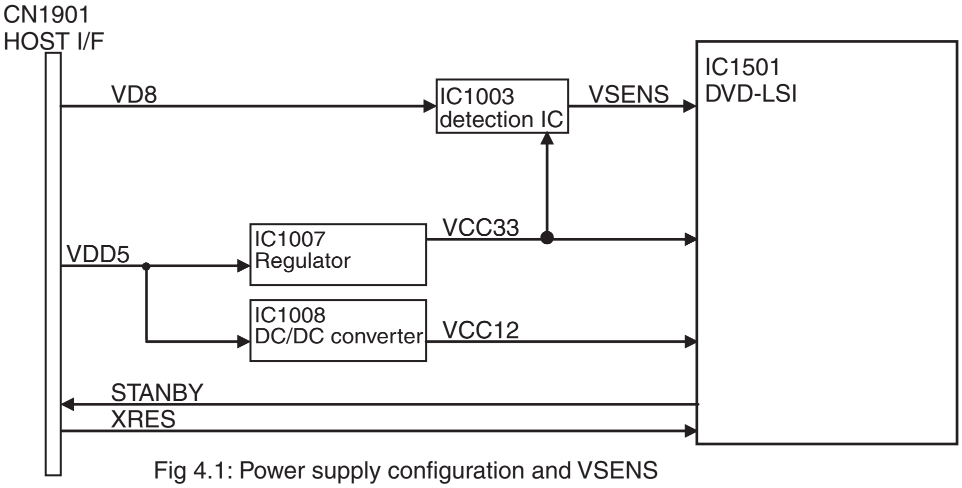

CN1901
HOST I/F
VD8
IC1003
detection IC
VSENS
IC1501
DVD-LSI
VCC33
VDD5
IC1007
Regulator
IC1008
DC/DC converter
VCC12
STANBY
XRES

Fig 4.1: Power supply configuration and VSENS

<Check> Check the voltage at the "VSENS" test point while the power is on.
Use the "DGND1" test point at the reference.

NO.	Check point	Module No.	Specification value	Unit
1	VSENS - DGND1	ALL	VCC33 x 0.7 or more	V

Side A

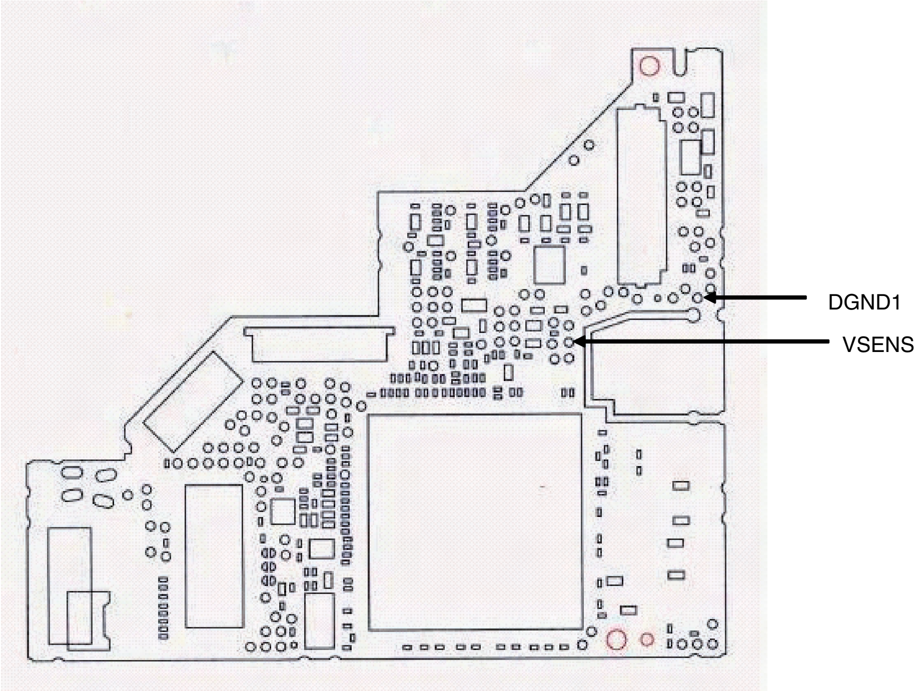

DGND1
VSENS

Fig 4.2: VSENS check point

Check 5: 27 MHz Normal?

<Outline> Each clock is created inside the IC1501 using the 27 MHz master crystal oscillator (X1501).

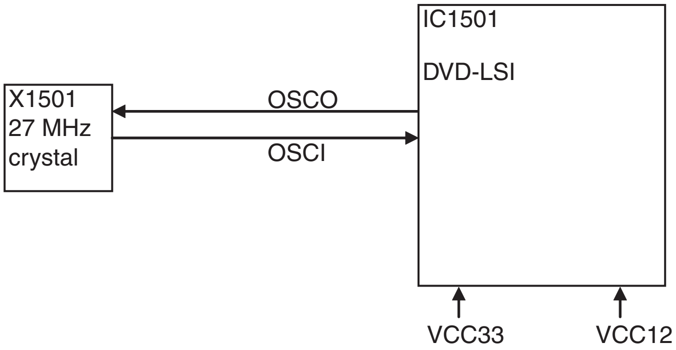

IC1501
DVD-LSI
X1501
27 MHz
crystal
OSCO
OSCI
VCC33
VCC12

Fig 5.1: Clock configuration

<Check method> Turn the power on, and check with DGND being the reference.
In case of NG, check the applicable line, periphery of IC1501,
soldering of the peripheral components and defective components.

NO.	Check point	Module No.	Specification value	Unit
2	IC1501 169pin	ALL	27 MHz ± 50 ppm	ppm

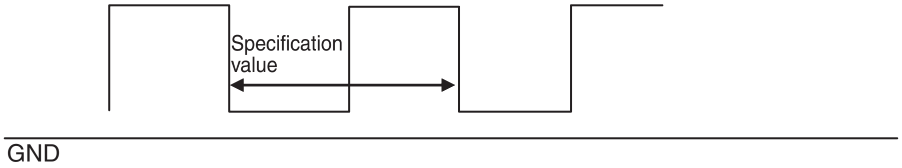

Specification
value
GND

Fig 5.2: Clock specification value

Side A

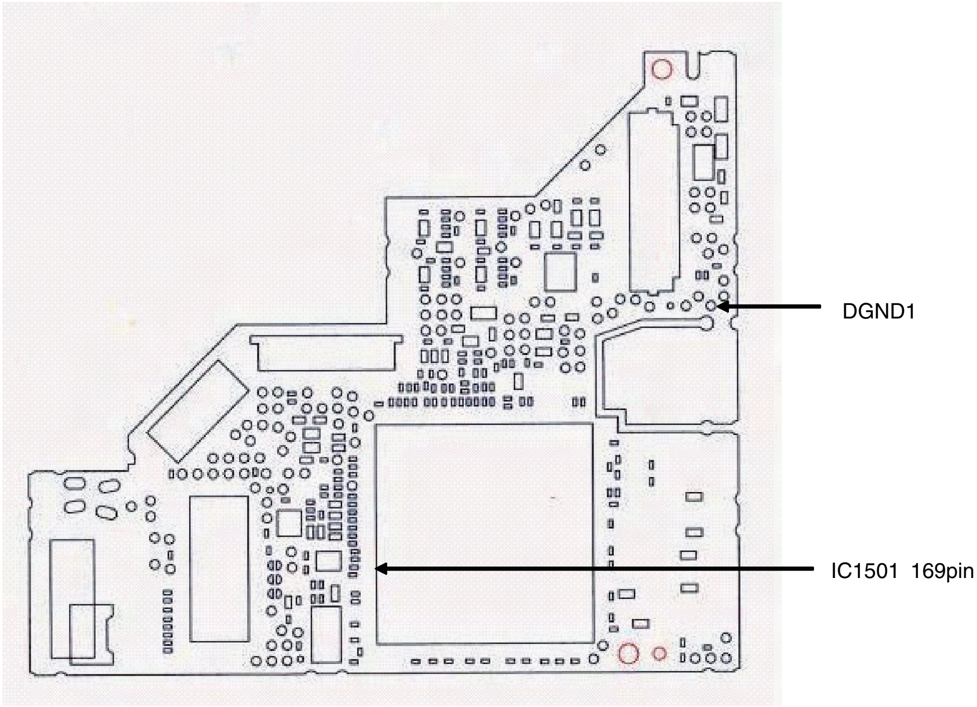

DGND1
IC1501 169pin

Fig 5.3: 27 MHz check point

Check 6: Is SDRAM I/F OK?

<Outline> In order to secure the MPEG stream data as the buffer,
the capacity of communication I/F SDRAM between the LSI and the memory is 128 Mbit.
Be careful as XCSM, XWE, XCAS, XRAS and XSCM of IC1481 are called differently in IC1501,
namely NCSM, NWE, NCAS, NRAS, NCSM.

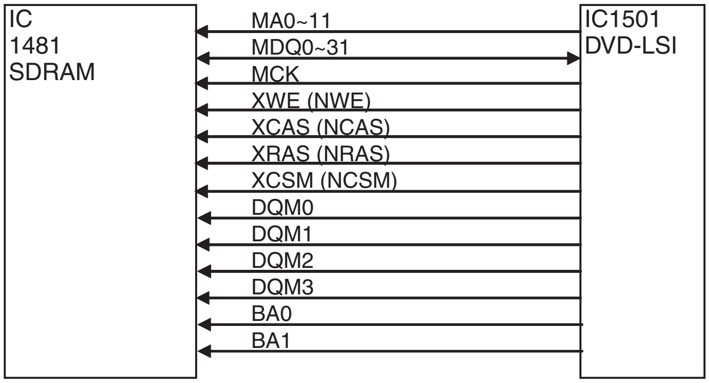
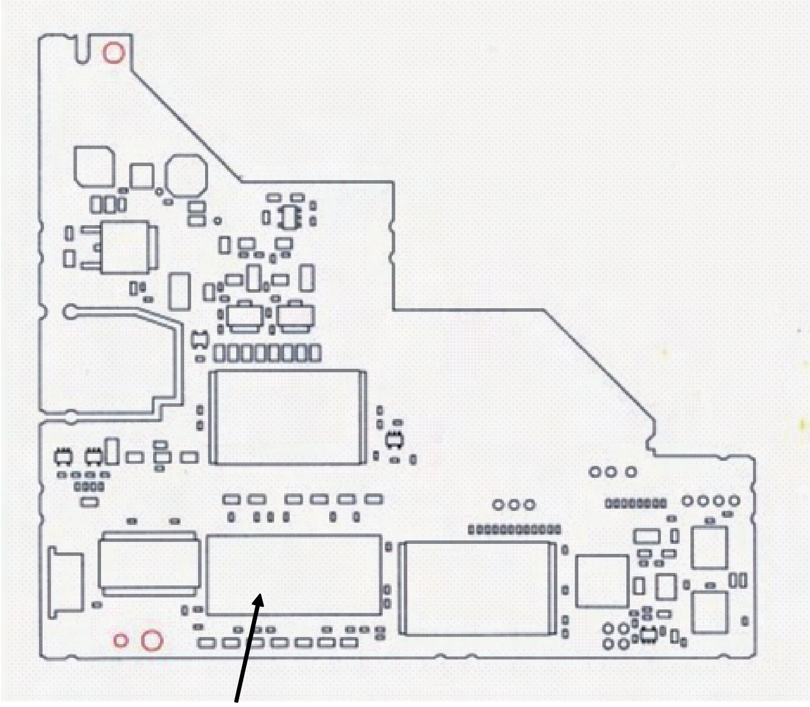

IC
1481
SDRAM
IC1501
DVD-LSI
MA0~11
MDQ0~31
MCK
XWE (NWE)
XCAS (NCAS)
XRAS (NRAS)
XCSM (NCSM)
DQM0
DQM1
DQM2
DQM3
BA0
BA1

Fig 6.1: SDRAM I/F

<Check> Check the conductivity at "check point 1" and "check point 2" without power.
In case of NG, check the soldering and defective components throughout the "output → input" of the applicable section.

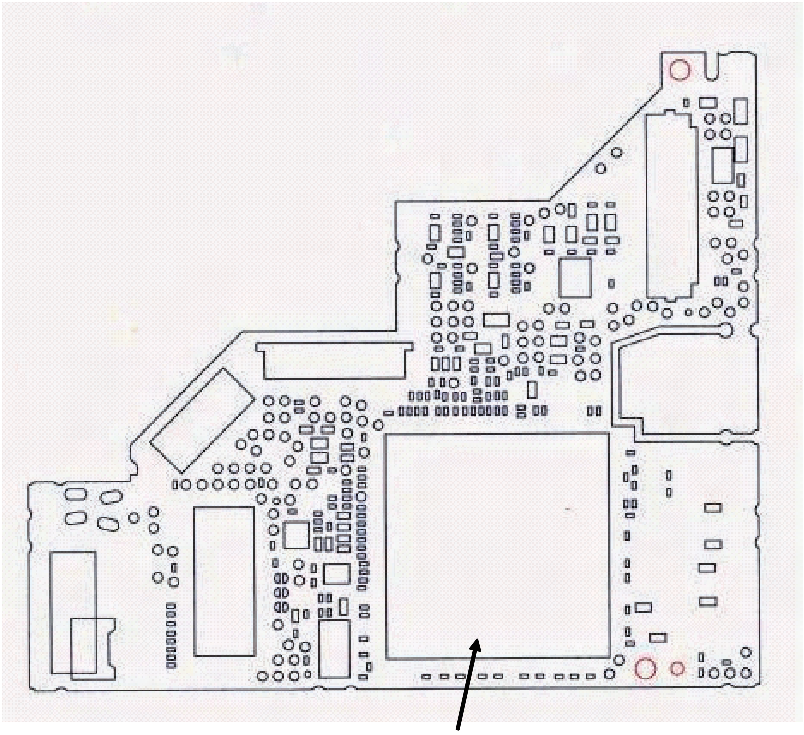
NO.	Signal name	Check point 1	Check point 2	Specification value
1	MA0	IC1481 25pin	IC1501 16pin	56 Ω ± 5 %
2	MA1	IC1481 26pin	IC1501 18pin	56 Ω ± 5 %
3	MA2	IC1481 27pin	IC1501 20pin	56 Ω ± 5 %
4	MA3	IC1481 60pin	IC1501 22pin	56 Ω ± 5 %
5	MA4	IC1481 61pin	IC1501 21pin	56 Ω ± 5 %
6	MA5	IC1481 62pin	IC1501 19pin	56 Ω ± 5 %
7	MA6	IC1481 63pin	IC1501 17pin	56 Ω ± 5 %
8	MA7	IC1481 64pin	IC1501 15pin	56 Ω ± 5 %
9	MA8	IC1481 65pin	IC1501 11pin	56 Ω ± 5 %
10	MA9	IC1481 66pin	IC1501 9pin	56 Ω ± 5 %
11	MA10	IC1481 24pin	IC1501 14pin	56 Ω ± 5 %
12	MA11	IC1481 21pin	IC1501 7pin	56 Ω ± 5 %
13	MDQ0	IC1481 2pin	IC1501 237pin	56 Ω ± 5 %
14	MDQ1	IC1481 4pin	IC1501 239pin	56 Ω ± 5 %
15	MDQ2	IC1481 5pin	IC1501 241pin	56 Ω ± 5 %
16	MDQ3	IC1481 7pin	IC1501 243pin	56 Ω ± 5 %
17	MDQ4	IC1481 8pin	IC1501 248pin	56 Ω ± 5 %
18	MDQ5	IC1481 10pin	IC1501 250pin	56 Ω ± 5 %
19	MDQ6	IC1481 11pin	IC1501 252pin	56 Ω ± 5 %
20	MDQ7	IC1481 13pin	IC1501 254pin	56 Ω ± 5 %
21	MDQ8	IC1481 74pin	IC1501 253pin	56 Ω ± 5 %
22	MDQ9	IC1481 76pin	IC1501 251pin	56 Ω ± 5 %
23	MDQ10	IC1481 77pin	IC1501 249pin	56 Ω ± 5 %
24	MDQ11	IC1481 79pin	IC1501 244pin	56 Ω ± 5 %
25	MDQ12	IC1481 80pin	IC1501 242pin	56 Ω ± 5 %
26	MDQ13	IC1481 82pin	IC1501 240pin	56 Ω ± 5 %
27	MDQ14	IC1481 83pin	IC1501 238pin	56 Ω ± 5 %
28	MDQ15	IC1481 85pin	IC1501 236pin	56 Ω ± 5 %
29	MDQ16	IC1481 31pin	IC1501 29pin	56 Ω ± 5 %
30	MDQ17	IC1481 33pin	IC1501 31pin	56 Ω ± 5 %
31	MDQ18	IC1481 34pin	IC1501 33pin	56 Ω ± 5 %
32	MDQ19	IC1481 36pin	IC1501 37pin	56 Ω ± 5 %
33	MDQ20	IC1481 37pin	IC1501 39pin	56 Ω ± 5 %
34	MDQ21	IC1481 39pin	IC1501 41pin	56 Ω ± 5 %
35	MDQ22	IC1481 40pin	IC1501 43pin	56 Ω ± 5 %
36	MDQ23	IC1481 42pin	IC1501 45pin	56 Ω ± 5 %
37	MDQ24	IC1481 45pin	IC1501 44pin	56 Ω ± 5 %
38	MDQ25	IC1481 47pin	IC1501 42pin	56 Ω ± 5 %
39	MDQ26	IC1481 48pin	IC1501 40pin	56 Ω ± 5 %
40	MDQ27	IC1481 50pin	IC1501 38pin	56 Ω ± 5 %
41	MDQ28	IC1481 51pin	IC1501 34pin	56 Ω ± 5 %
42	MDQ29	IC1481 53pin	IC1501 32pin	56 Ω ± 5 %
43	MDQ30	IC1481 54pin	IC1501 30pin	56 Ω ± 5 %
44	MDQ31	IC1481 56pin	IC1501 28pin	56 Ω ± 5 %
45	MCK	IC1481 68pin	IC1501 234pin	0.17 Ω ± or lower
46	XWE	IC1481 17pin	IC1501 3pin	56 Ω ± 5 %
47	XCAS	IC1481 18pin	IC1501 4pin	56 Ω ± 5 %
48	XRAS	IC1481 19pin	IC1501 5pin	56 Ω ± 5 %
49	XCSM	IC1481 20pin	IC1501 6pin	56 Ω ± 5 %
50	DQM0	IC1481 16pin	IC1501 255pin	56 Ω ± 5 %
51	DQM1	IC1481 71pin	IC1501 256pin	56 Ω ± 5 %
52	DQM2	IC1481 28pin	IC1501 26pin	56 Ω ± 5 %
53	DQM3	IC1481 59pin	IC1501 27pin	56 Ω ± 5 %
54	BA0	IC1481 22pin	IC1501 8pin	56 Ω ± 5 %
55	BA1	IC1481 23pin	IC1501 10pin	56 Ω ± 5 %

Side B



Check point 1 (IC1481)

Side A



Check point 2 (IC1501)

Fig 6.2: SDRAM I/F check point

Check 7: Is VD8, VCC5 power supply voltage OK?

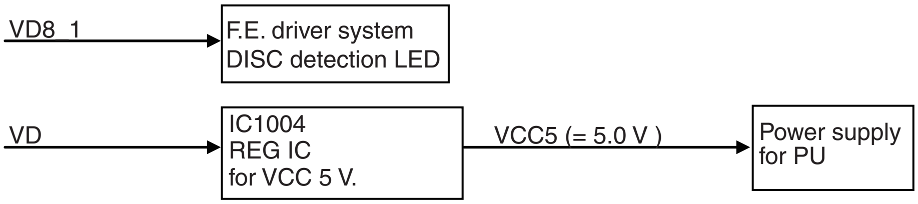

VD8_1
F.E. driver system
DISC detection LED
VD
IC1004
REG IC
for VCC 5 V.
VCC5 (= 5.0 V)
Power supply
for PU

Fig 7.1: Power supply configuration

<Check> Check the voltage at the "VD8_1, VD and VCC5_1" test point while the power is on.
Use the "PGND3 and AGND1" test point at the reference.

NO.	Check point	Module No.	Specification value	Unit
1	VD8_1 - PGND3	ALL	8.0 ± 0.4	V
2	VD - PGND3	ALL	8.0 ± 0.4	V
3	VCC5_1- AGND1	ALL	5.0 ± 0.1	V

Side A

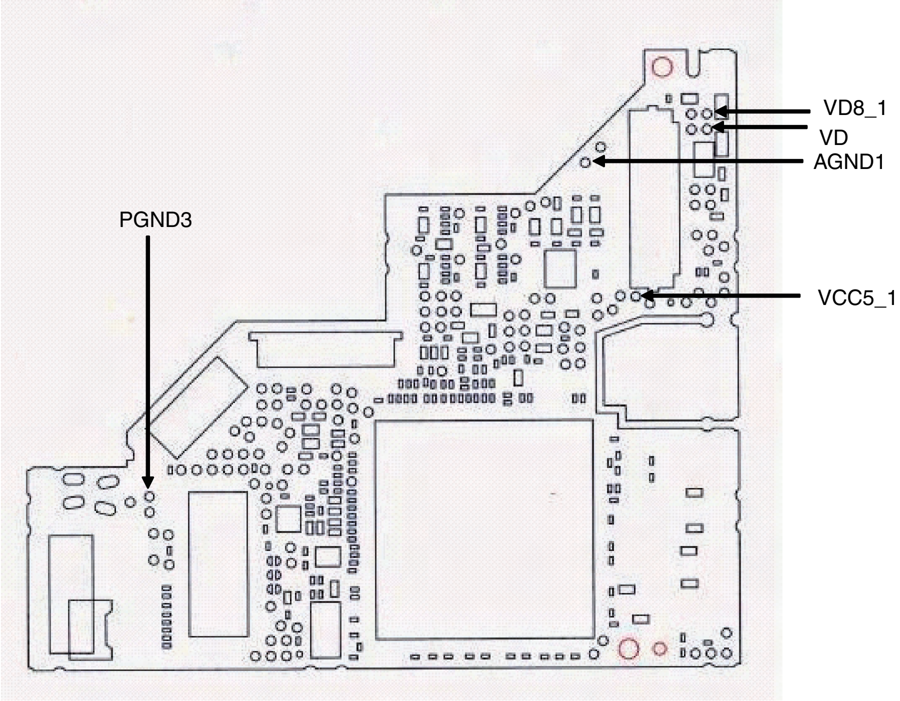

VD8_1
VD
AGND1
PGND3
VCC5_1

Fig 7.2: VD8, VCC5 voltage check points

Check 8: Is AVCC5 voltage OK?

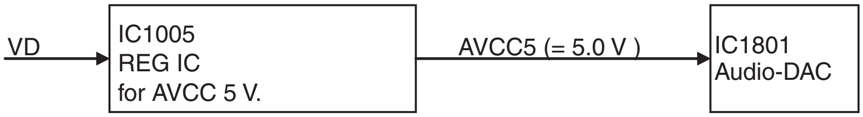

VD
IC1005
REG IC
for AVCC 5 V.
AVCC5 (= 5.0 V)
IC1801
Audio-DAC

Fig 8.1: Power supply configuration

<Check> Playback DVD-REF-A1 TITLE 1 and check the voltage at the stylus.
Check with PGND and GNDAU being the reference.

NO.	Check point	Module No.	Specification value	Unit
1	VD - PGND_3	ALL	8.0 ± 0.4	V
2	AVCC5 - GNDAU1	ALL	5.0 ± 0.1	V

Side A

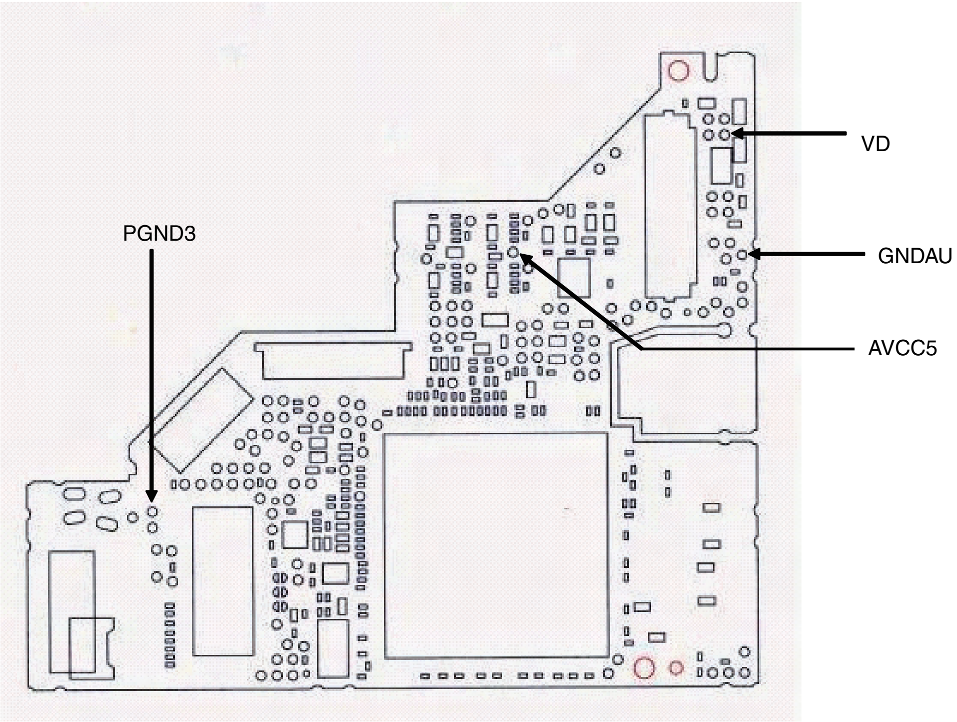

VD
PGND3
GNDAU
AVCC5

Fig 8.2: VD8, AVCC5 voltage check points

Check 9: Is DACCLK normal?

<Outline> DACCLK for Audio-DAC is created by IC1501 using the 27 MHz master crystal oscillator (X1501).

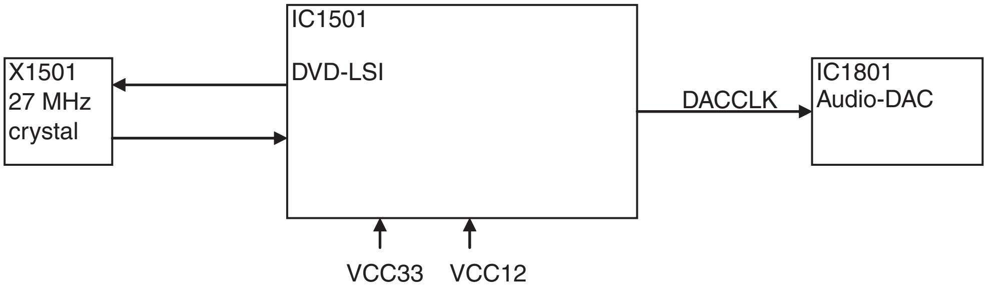

IC1501
DVD-LSI
X1501
27 MHz
crystal
DACCLK
IC1801
Audio-DAC
VCC33
VCC12

Fig 9.1: Clock configuration

<Check method>
DVD: DVD-REF-A1 TITLE 1
CD: Playback a normal CDDA.
Common to all DVD-V compatible modules.
Check with DGND being the reference.
In case of NG, check the applicable line, the periphery of IC1501, soldering of the peripheral components and defective components.

NO.	Check point 1 (stylus)	Media	Specification value 1	Specification value 2	Specification value 3
1	DACCK	DVD	2.0 V~VCC33V	DGND~0.8 V	36.864 0 MHz ± 300 ppm
2	DACCK	CD	2.0 V~VCC33V	DGND~0.8 V	33.868 8 MHz ± 300 ppm

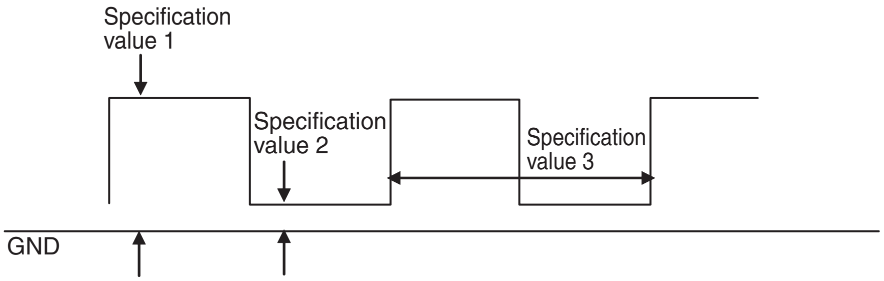

Specification
value 1
Specification
value 2
Specification
value 3
GND

Fig 9.2: Clock specification value

Side A

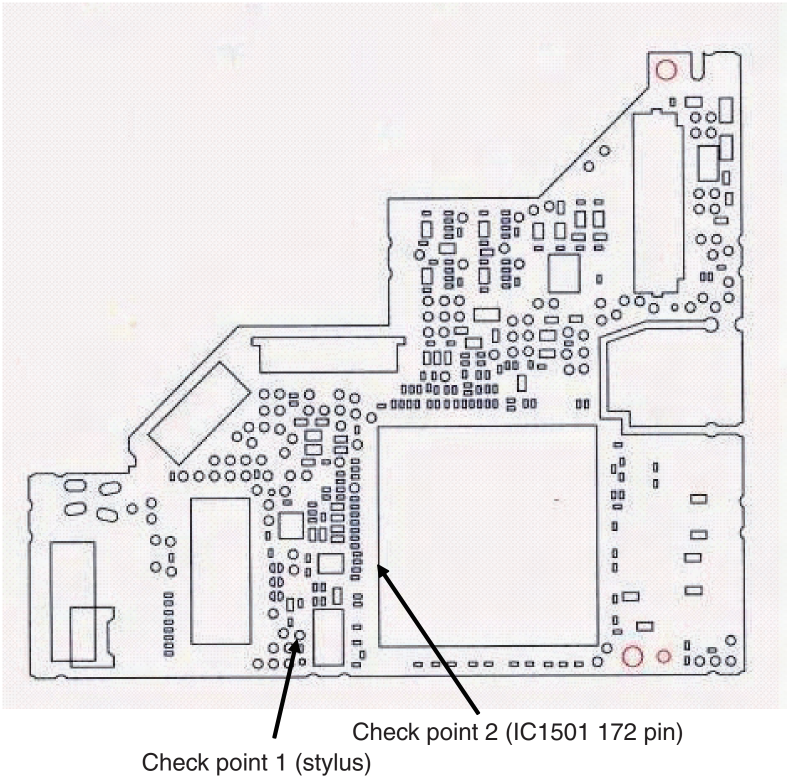

Check point 2 (IC1501 172 pin)
Check point 1 (stylus)

Fig 9.3: 27 MHz, DACCLK check point

Check 10: Is the audio circuit OK?

<Outline> The serial 3 lines digital output + DACCLK, output from DVD-LSI (IC1501), are converted to analog audio signal at Audio-DAC (IC1801) and are output from the HOST I/F (CN1901).
Simultaneously, the analog MUTE signal is also output from DVD-LSI (IC1501) via the HOST I/F.
The digital audio signal (IECOUT), output from DVD-LSI (IC1501), is output via CN1852.

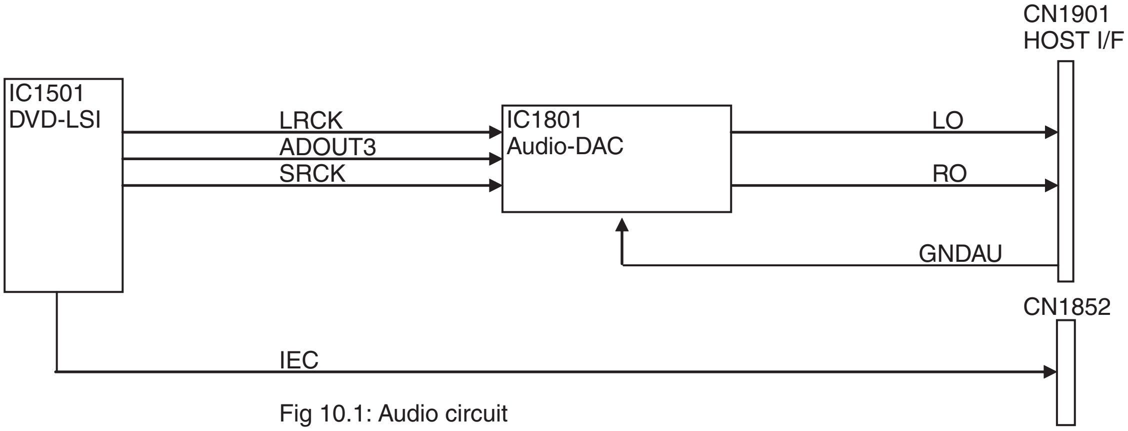

CN1901
HOST I/F
IC1501
DVD-LSI
LRCK
ADOUT3
SRCK
IC1801
Audio-DAC
LO
RO
GNDAU
CN1852
IEC

Fig 10.1: Audio circuit

<Check method> Playback DVD-REF-A1 TITLE 2 CHAPTER 1 (48 k/16 bit 1 kHz 0 dB), and check with DGND being the reference.
In case of NG, check the applicable line, periphery of major components as described in the above drawing, soldering of the peripheral components and defective components.

NO.	Check point 1 (stylus)	Specification value 1	Specification value 2	Reference waveform
1	ADOUT3	VCC33V-0.6 V or higher	0.4 V or lower	Waveform 1
2	SRCK	VCC33V-0.6 V or higher	0.4 V or lower	Waveform 2
3	LRCK	VCC33V-0.6 V or higher	0.4 V or lower	Waveform 3

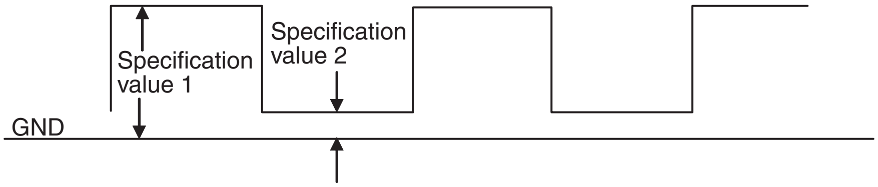

Specification value 1
Specification value 2
GND

Fig 10.2: Serial 3 lines specification value

Side A

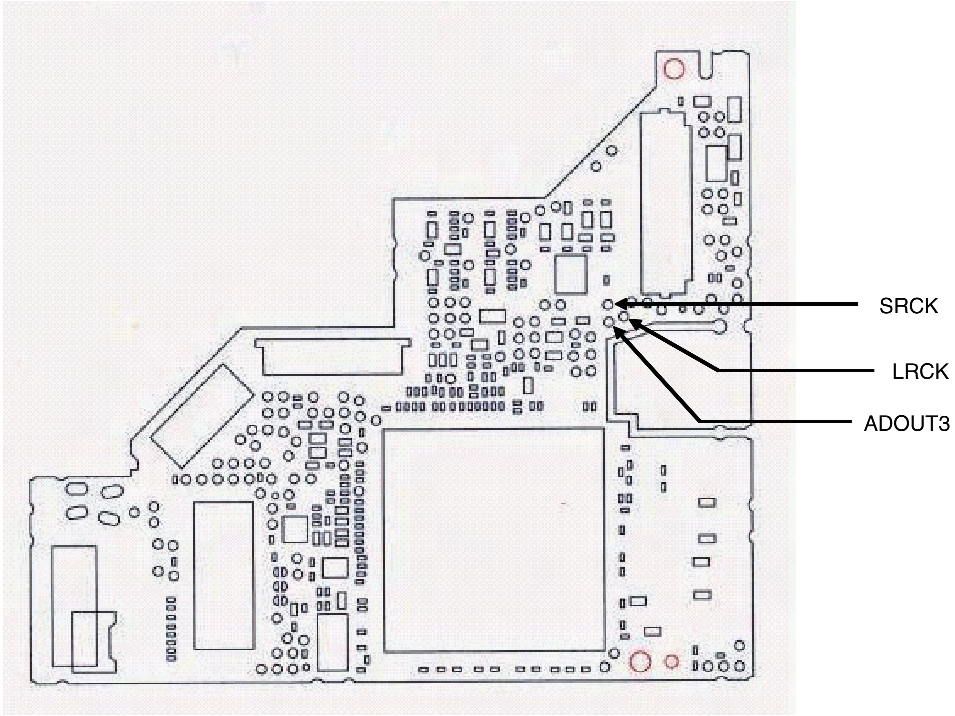
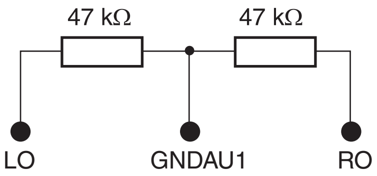

SRCK
LRCK
ADOUT3

Fig 10.3: Serial 3 lines check points

The following checks shall be conducted using the following measurement circuits with GNDAU1 being the reference.


47 kΩ
47 kΩ
LO
GNDAU1
RO

NO.	Check point 1 (stylus)	Specification value (rms)	Reference waveform
4	LO	1 400 ± 150 mV	Waveform 4
5	RO	1 400 ± 150 mV	Waveform 4

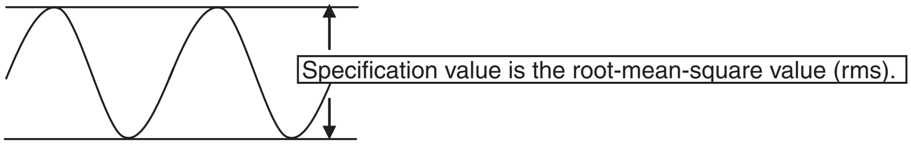

Specification value is the root-mean-square value (rms).

Fig 10.4: Analog audio out (LO, RO) specification value.

Side A

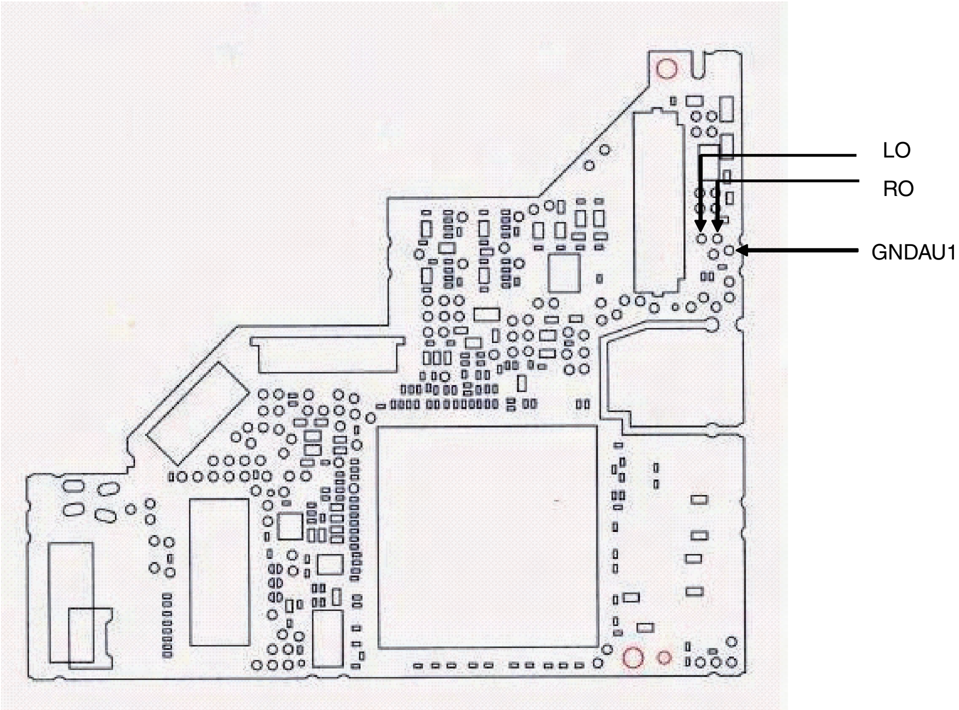

LO
RO
GNDAU1

Fig 10.5: Analog audio out check point

Check with DGND being the reference.
Check 2pin cord after connecting it to a jig, etc.

NO.	Check point 1 (stylus)	Specification value 1	Specification value 2	Reference waveform
6	IEC	VCC33V-0.6 V or higher	0.4 V or lower	Waveform 5

Side A

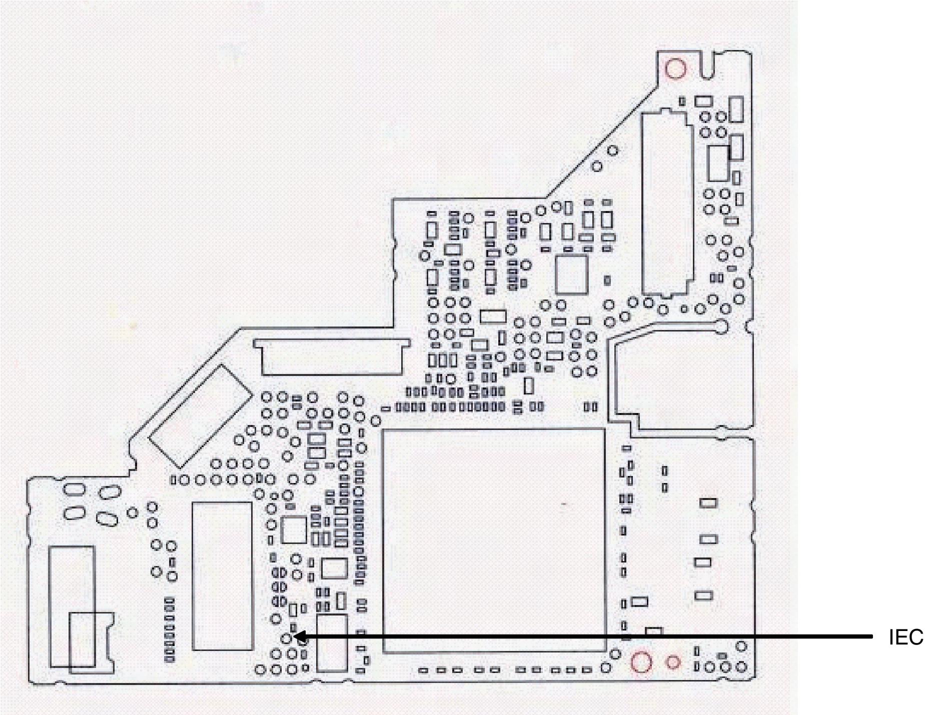
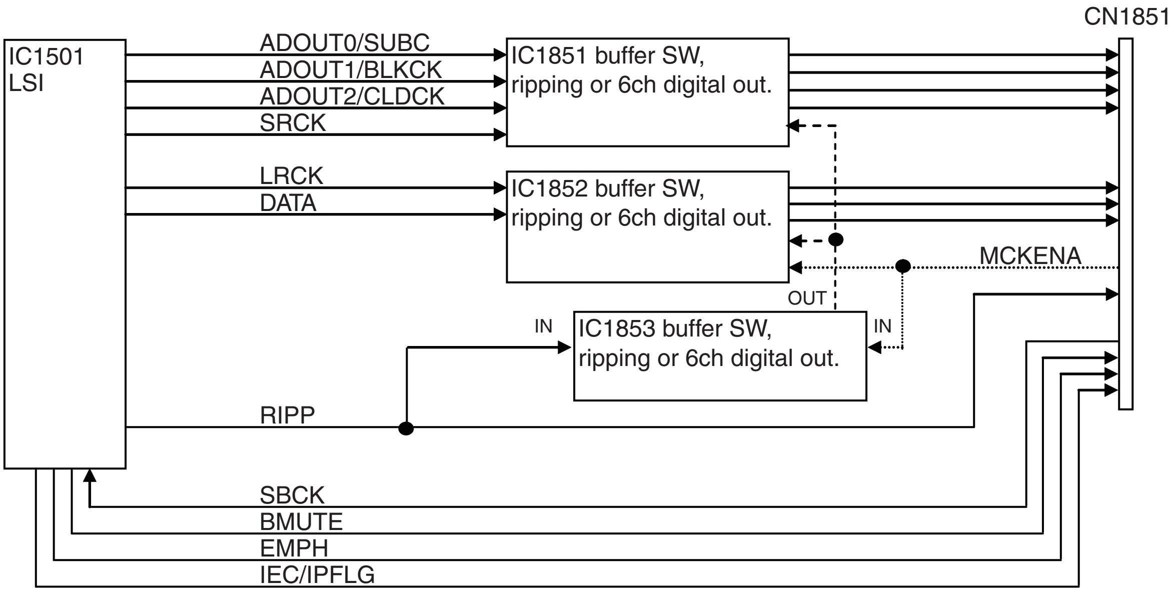


Fig 10.6: Digital audio signal (IECOUT) check point

<Outline> At the time of 6ch digital out, the serial 6 lines output from DVD-LSI (IC1501) is output via CN1581.
Furthermore, at the time of ripping, the serial 3 lines digital output + SUBC, output from DVD-LSI (IC1501),
is output in 4 times speed via CN1851.


CN1851
IC1501
LSI
ADOUT0/SUBC
ADOUT1/BLKCK
ADOUT2/CLDCK
SRCK
LRCK
DATA
IC1851 buffer SW,
ripping or 6ch digital out.
IC1852 buffer SW,
ripping or 6ch digital out.
MCKENA
OUT
IN
IC1853 buffer SW,
ripping or 6ch digital out.
IN
RIPP
SBCK
BMUTE
EMPH
IEC/IPFLG

The signal at CN1851 for 6ch digital out/Ripping.

Pin No.	Pin name	6ch digital out	Ripping
23	SRCK	SRCK	SRCK
21	LRCK	LRCK	LRCK
19	AD0/SUBC	ADOUT0	SUBC
17	AD1/BLK	ADOUT1	BLKCK
15	AD2/CLD	ADOUT2	CLDCK
13	AD3/DATA	ADOUT3	DATA
11	IEC/IPFLG	IEC	IPFLG
9	-	-	-
7	SBCK	-	SBCK
5	BMUTE	BMUTE	-
4	MCKENA	Low	High
3	RIPP	High	Low
2	EMPH	EMPH	EMPH
Pins 1, 6, 8, 10, 12, 14, 16, 18, 20, 22 and 24 are GNDD.			

Fig 10.7: 6ch digital out/Ripping circuit

Playback DVD-REF-A1 TITLE22 CHAPTER 1, and check with GNDD being the reference.
In case of NG, check the applicable line, the periphery of the major components in the drawing above, soldering of the peripheral components and defective components.

Check 24pin FFC after connecting it to a jig, etc.

NO.	Check point 1 (stylus)	Specification value 1	Specification value 2
7	SRCK	VCC33V-0.6 V or higher	0.4 V or lower
8	LRCK	VCC33V-0.6 V or higher	0.4 V or lower
9	ADOUT0	VCC33V-0.6 V or higher	0.4 V or lower
10	ADOUT1	VCC33V-0.6 V or higher	0.4 V or lower
11	ADOUT2	VCC33V-0.6 V or higher	0.4 V or lower
12	IEC	VCC33V-0.6 V or higher	0.4 V or lower
13	MCKENA	-	VCC33V x 0.3 V or lower

Rip common CDDA, and check with GNDD being the reference.
In case of NG, check the applicable line, the periphery of the major components in the drawing above, soldering of the peripheral components and defective components.

Check 24pin FFC after connecting it to a jig, etc.

NO.	Check point 1 (stylus)	Specification value 1	Specification value 2
14	SRCK	VCC33V-0.6 V or higher	0.4 V or lower
15	LRCK	VCC33V-0.6 V or higher	0.4 V or lower
16	SUBC	VCC33V-0.6 V or higher	0.4 V or lower
17	BLKCK	VCC33V-0.6 V or higher	0.4 V or lower
18	CLDCK	VCC33V-0.6 V or higher	0.4 V or lower
19	DATA	VCC33V-0.6 V or higher	0.4 V or lower
20	SBCK	VCC33V-0.6 V or higher	0.4 V or lower
21	RIPP	-	VCC33V x 0.3 V or lower

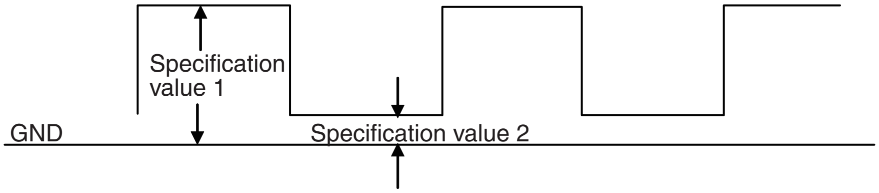
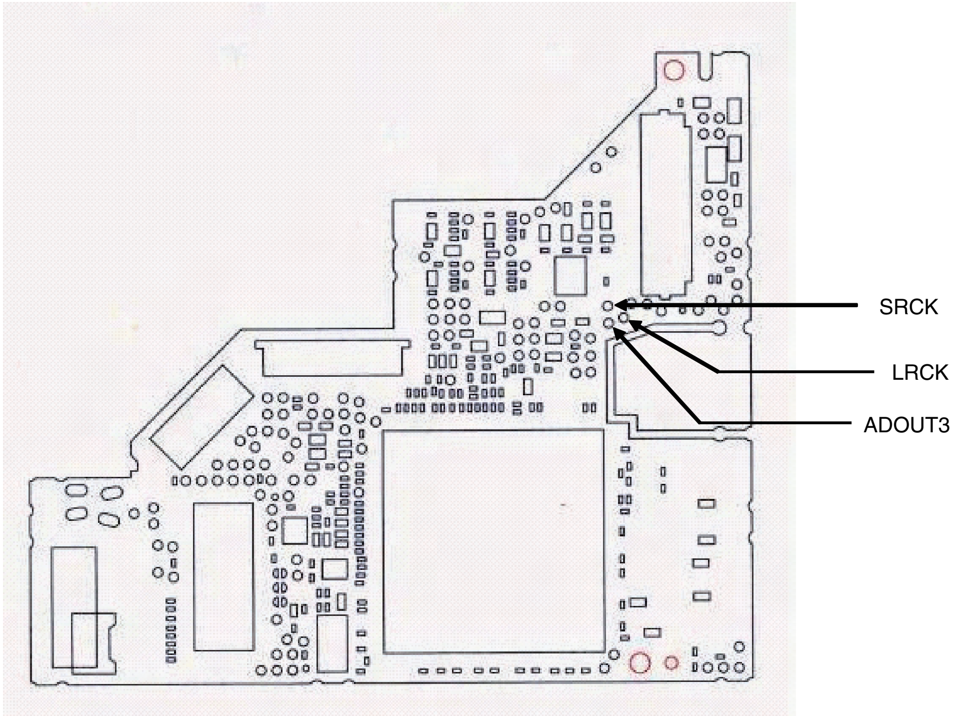


Fig 10.8: 6ch digital out/Ripping specification value

Side A


SRCK
LRCK
ADOUT3

Side B

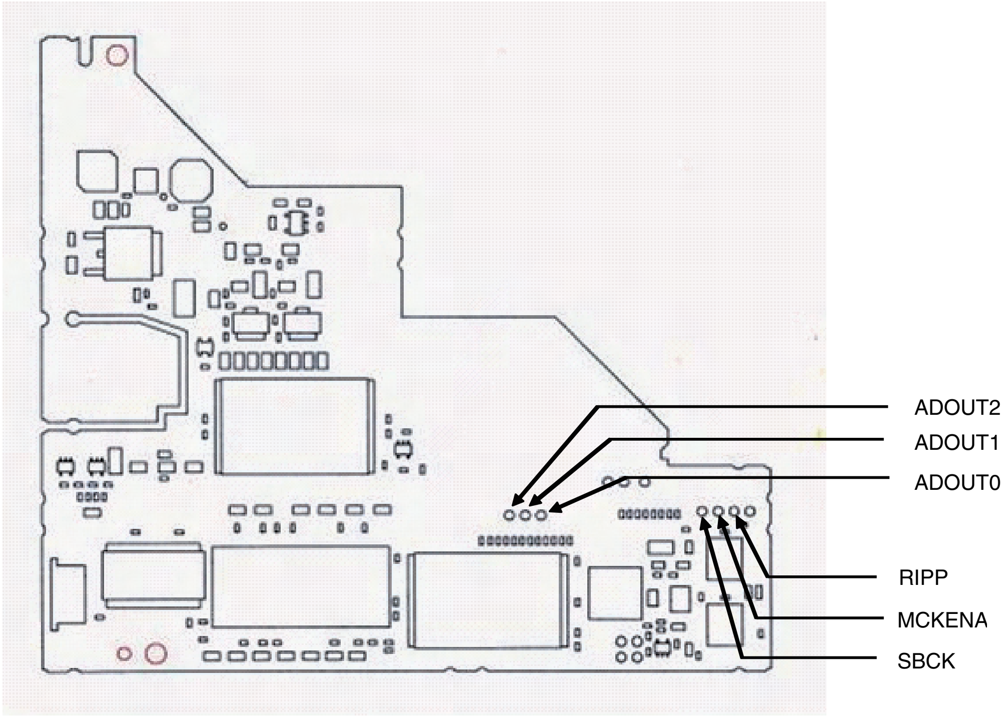

ADOUT2
ADOUT1
ADOUT0
RIPP
MCKENA
SBCK

Fig 10.9: 6ch digital out/Ripping check point

Check 11: Is the video circuit OK?

<Outline> Composite signal and component signal are output from DVD-LSI (IC1501), and are output from the HOST I/F (CN1901) via a buffer circuit.

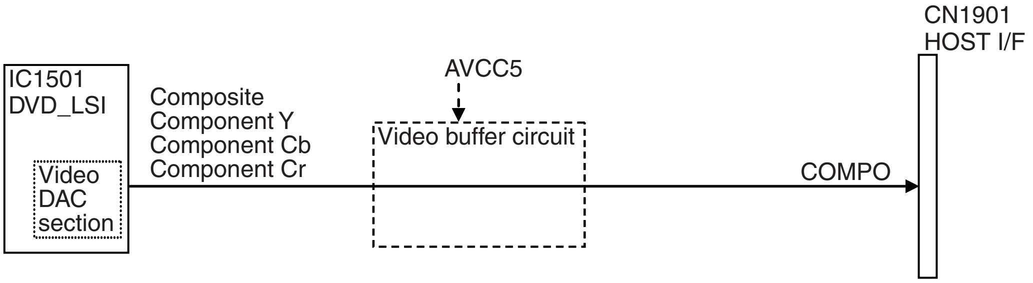

CN1901
HOST I/F
AVCC5
IC1501
DVD_LSI
Composite
Component Y
Component Cb
Component Cr
Video buffer circuit
Video
DAC
section
COMPO

Fig 11.1: Video circuit

<Checking method> Playback DVD-REF-A1 TITLE2 CHAPTER5 (WHITE 100%), and monitor COMPO signal with an oscilloscope with GNDV1 (stylus) being the reference. Set the trigger mode to "TV trigger" and the trigger line to "150 line".

Check point 1 (stylus)

NO.		Specification value	Reference waveform
1	COMPO	1 000 mVpp ± 5 %	Waveform 6

In case of NG, check the applicable line, the periphery of the major components in the drawing above, soldering of the peripheral components and defective components.

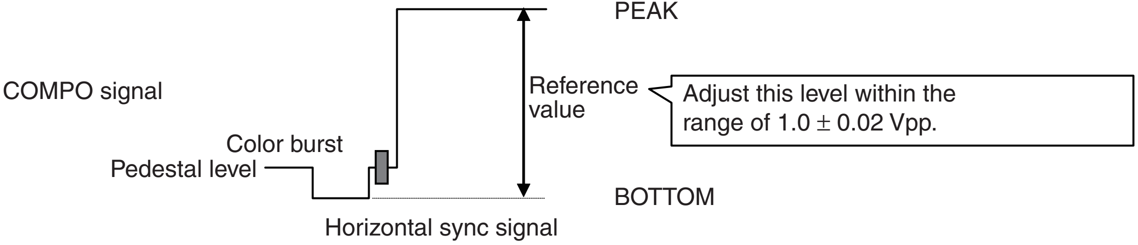

PEAK
COMPO signal
Reference
value
Adjust this level within the
range of 1.0 ± 0.02 Vpp.
Color burst
Pedestal level
BOTTOM
Horizontal sync signal

Fig 11.2: Waveform for the case of composite white 100% output

<Video level readjustment method>
In case the video composite output is outside of the specification value, readjust the level according to the method described below.
(Note : Units are exchanged, the video output is not adjusted.)
Turn the volume (VR1671) to adjust the video level within the range of 1.0 ± 0.02 Vpp.
The adjustment specification is 1.0 ± 0.02 Vpp.

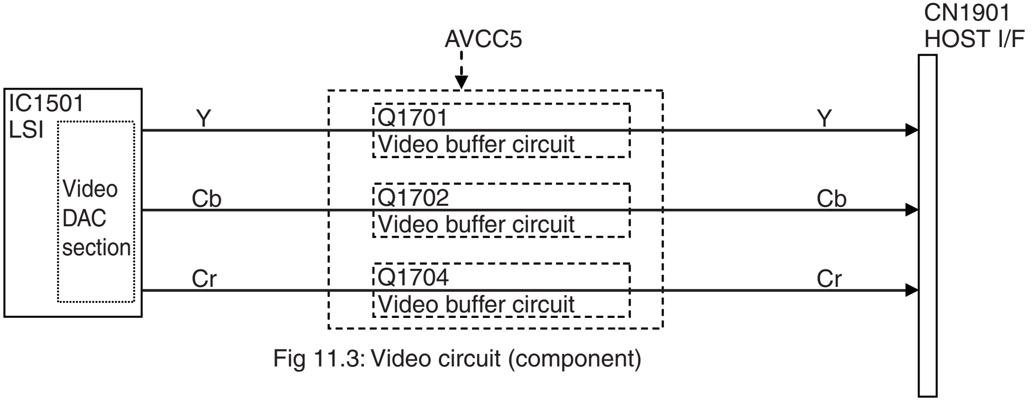

CN1901
HOST I/F
AVCC5
IC1501
LSI
Video
DAC
section
Y
Cb
Cr
Q1701
Video buffer circuit
Q1702
Video buffer circuit
Q1704
Video buffer circuit
Y
Cb
Cr

Fig 11.3: Video circuit (component)

<Checking method> Playback DVD-REF-A1 TITLE2 CHAPTER19 (100% Color Bars), and monitor Y, Cb, and Cr signal with an oscilloscope with GNDV1 (stylus) being the reference. Set the trigger mode to "TV trigger" and the trigger line to "150 line".

NO.	Check point 1 (stylus)	Specification value	Reference waveform
2	Y	1 000 mVpp ± 5%	Waveform 7
3	Cb	700 mVpp ± 5%	Waveform 7
4	Cr	700 mVpp ± 5%	Waveform 7

In case of NG, check the applicable line, the periphery of the major components in the drawing above, soldering of the peripheral components and defective components.

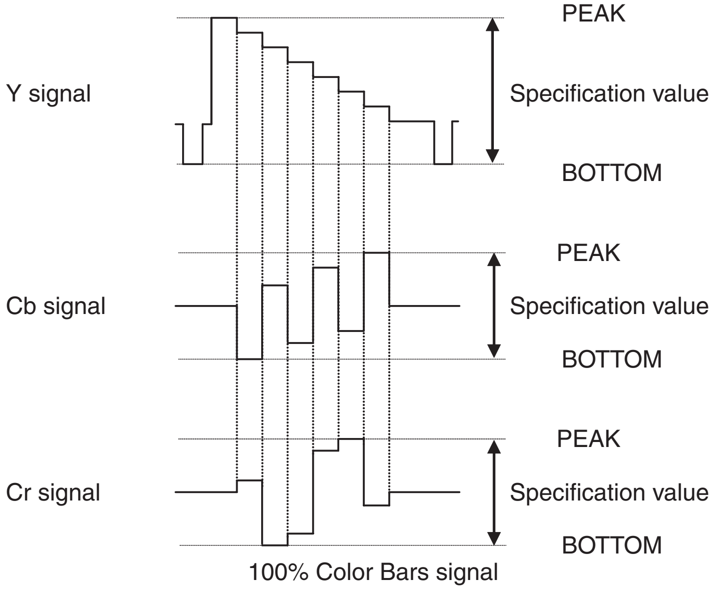

Y signal
PEAK
Specification value
BOTTOM
Cb signal
PEAK
Specification value
BOTTOM
Cr signal
PEAK
Specification value
BOTTOM
100% Color Bars signal

Fig 11.4 Waveform for the case of component 100% Color Bars output

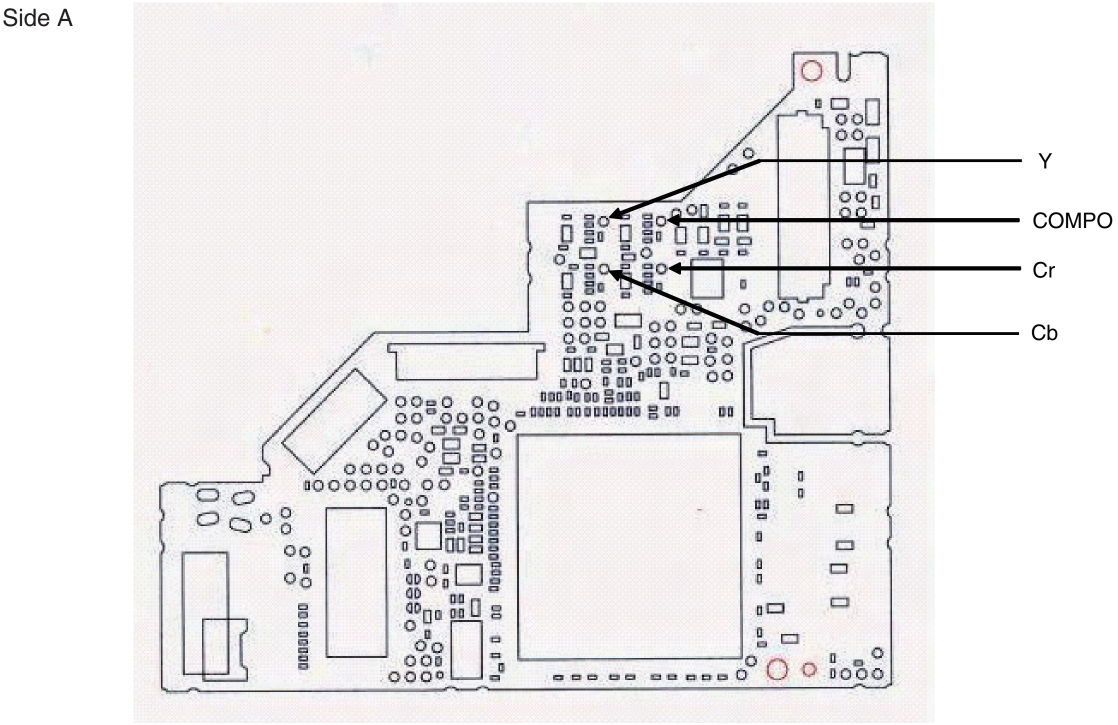

Side A
Y
COMPO
Cr
Cb

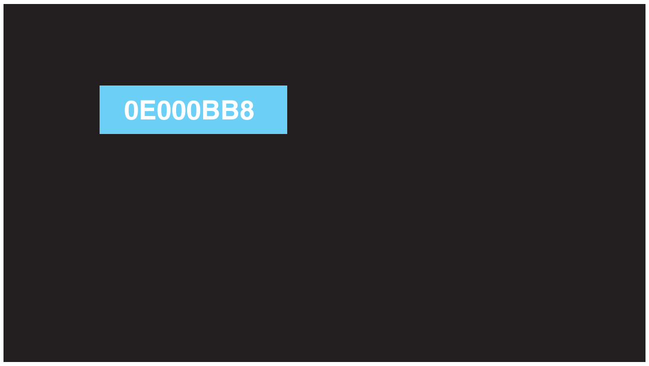
Fig 11.5: VIDEO signal check point

Check 12:How to judge whether the flash memory has reached its life or not.

If the reaction to user operation is slow or operation is slow in general, there is a possibility that the flash memory has reached its life.
Make judgment regarding the flash memory life by looking at the display of the LD energizing time.

1.Let the LD energizing time displayed.
(Refer to the FE test mode for the method of displaying the LD energizing time.)
2.If the second digit from the left of the energizing time display is showing E,
such as "∗E∗∗ ∗∗∗∗", it means that the flash memory has reached its life.

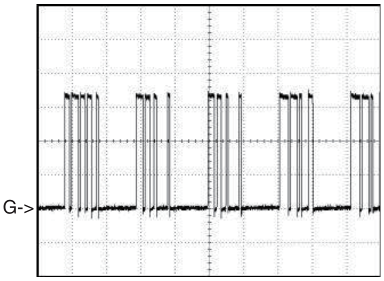
Example:



0E000BB8

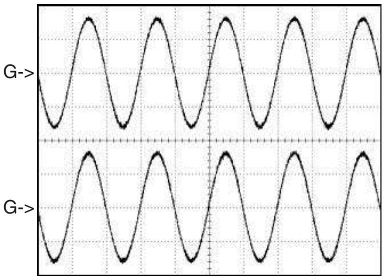
AUDIO VIDEO

CH1 : ADOUT3
Reference voltage: DGND2 1 V/div. 5 µsec/div



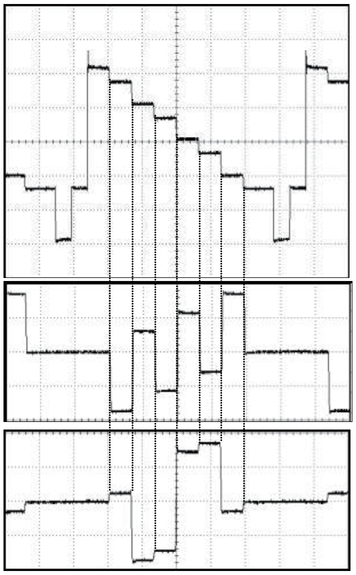
Waveform 1

CH1 : LO
CH2 : RO
Reference voltage: GNDAU2 1 V/div. 500 µsec/div



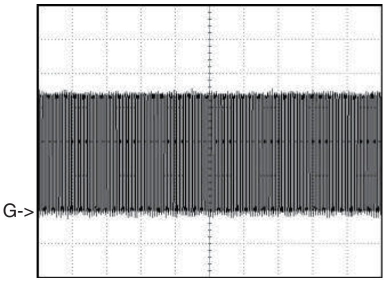
Waveform 4

[100% Color Bars]
CH1 : Y
CH2 : Cb
CH3 : Cr
Reference voltage: GNDV1 200 mV/div. 5 µsec/div



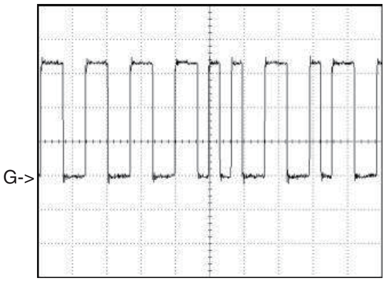
Waveform 7

CH1 : SRCK
Reference voltage: DGND2 1 V/div. 5 µsec/div



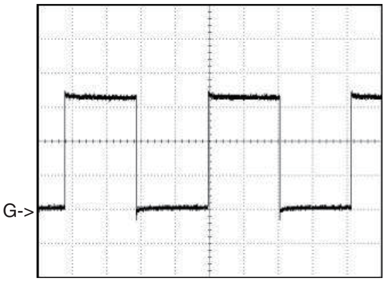
Waveform 2

CH1 : IECOUT
Reference voltage: DGND2 1 V/div. 500 nsec/div



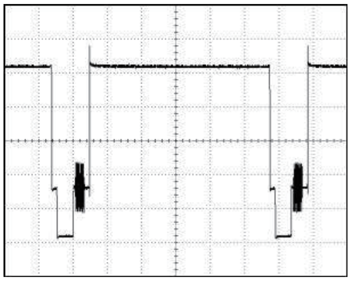
Waveform 5

CH1 : LRCK
Reference voltage: DGND2 1 V/div. 5 µsec/div



Waveform 3

[WHITE 100IRE]
CH1 : COMPO
Reference voltage: GNDV1 200 mV/div. 10 µsec/div



Waveform 6

5.3 ERROR CODE LIST

Error status	OSD *1	UART *2	Meaning	Method of reset			
				ACC Off/On	Source Off/On	Eject	Play Key
Media Error	It is a disc unable to be played back. NON-PLAYABLE DISC	00h	A disc containing the unplayable Format only.	X	X	X	-
Open	(No display)	10h	Door open error	*	*	*	*
Read Error	ERROR-02-99	20h	Transfer start error	X	X	X	X
Focus Error(Focus Error in mechanism set up)	ERROR-02-90	21h	Focus error	X	X	X	X
Surface Error	ERROR-02-9E	22h	Focus error during set up (A focus has never been achieved with that disc.)	X	X	X	X
Address not found (Invalid Track)	ERROR-02-80	23h	Address not found.	X	X	X	X
Spindle Lock	ERROR-02-91	24h	Spindle lock NG (the disc cannot rotate)	X	X	X	X
Carriage HOME	ERROR-02-92	25h	Carriage home NG (The pick up tries to return to carriage home, but it cannot go back and stopped.)	X	X	X	X
ID/SUBCODE Read Error	ERROR-02-94	26h	ID/SUBCODE Read Error (ID/SUBCODE cannot be read due to scratch or stain.)	X	X	X	X
AV CHIP decode Error	ERROR-02-9A	2Ah	AV CHIP decode NG (AV chip cannot be decoded.)	X	X	X	X
AV CHIP Recovery NG	ERROR-02-9B	2Bh	AV CHIP recovery NG	X	X	X	X
Error of PLAY BACK Mode Status	ERROR-02-9C	2Ch	Playback state error (An error due to software bug.)	X	X	X	X
Disc Data Error	ERROR-02-9D	2Dh	Disc Data NG	X	X	X	X
Temp Error (In Case of High Temperature)	Temperature protection circuit is being activated. THERMAL PROTECTION IN MOTION	30h	High temperature (Playback is stopped because the pick up temperature is 89 °C or higher.)	X	-	-	-
No Disc (including Disc loading and ejecting)	(No display)	40h	Disc has not been inserted. (Including Load in process or Eject in process.)	*	*	*	*
Loading_Mecha Error	(No display)	50h	Loading mechanism error (The disc cannot be clamped.)	X	-	X	-
DRM Error	It is a protected disc. PROTECTED DISC	70h	DRM error (All music cannot be played back due to DRM.)	-	-	X	-
Region code Error NG	Region code is incorrect. DIFFERENT REGION DISC	90h	Region code NG (Unable to be played back due to incorrect mechanism region.)	-	-	X	-
CPPM*3 Key Error *4	It is a disc unable to be played back. NON-PLAYABLE DISC	91h	Key Error for playback	-	-	X	-
CPRM Key Error *7	NON-PLAYABLE DISC	93h	Key Error for playback	-	-	X	-
AWM*5 Error *4	(No display)	*6	Playback the illegally copied disc by DVD-A (Mute the sound on the mechanism side.)	X	X	X	-
REQUEST error	ERROR-02-A0	A0h	REQUEST error	X	X	X	X
Failure in issuing read command (chip dependent)	ERROR-02-A1	A1h	Failure in issuing the read command	X	X	X	X
Adjustment of L0 is NG.	ERROR-02-A2	A2h	L0 adjustment is NG.	X	X	X	X
Adjustment of L1 is NG.	ERROR-02-A3	A3h	L1 adjustment is NG	X	X	X	X
LD system NG	ERROR-02-A4	A4h	LD system NG	X	X	X	X
Gain adjustment system NG.	ERROR-02-A5	A5h	Gain adjustment system NG.	X	X	X	X
Gain determining system NG.	ERROR-02-A6	A6h	Gain determining system NG.	X	X	X	X
Servo initial setting related items NG.	ERROR-02-A7	A7h	Servo initial setting related items NG.	X	X	X	X
Disc is not clamped yet.	ERROR-02-A8	A8h	Disc is not clamped yet.	X	X	X	X
Tracking system NG.	ERROR-02-A9	A9h	Tracking system NG	X	X	X	X
Media setting system NG.	ERROR-02-AA	AAh	Media setting system NG	X	X	X	X
Focus Error	ERROR-02-AB	ABh	JUMP over layers NG	X	X	X	X
Error of PLAY BACK Mode Status	ERROR-02-B0	B0h	Navigation command error	X	X	X	X
Error of PLAY BACK Mode Status	ERROR-02-B1	B1h	Retry over	X	X	X	X
Undefined Error	ERROR-FF-FF	FFh	Undefined error	X	X	X	X

X: Cancel the error by operation. -: Error is not cancelled by operation. *: No setting

*1 A content displayed on OSD. As for the items having multiple display patterns, the upper row is for the Japanese version Full GUI, and the lower row is for the Touch Panel model and Full GUI (English version).

*2 A parameter of UART command, such as "receipt error notice", that the DVD mechanism transmits.

*3 CPPM(Content Protection for Prerecorded Media) : A copyright protection technique used in DVD-A. The protection is realized by using the keys recorded on the media and the device key held by the player.

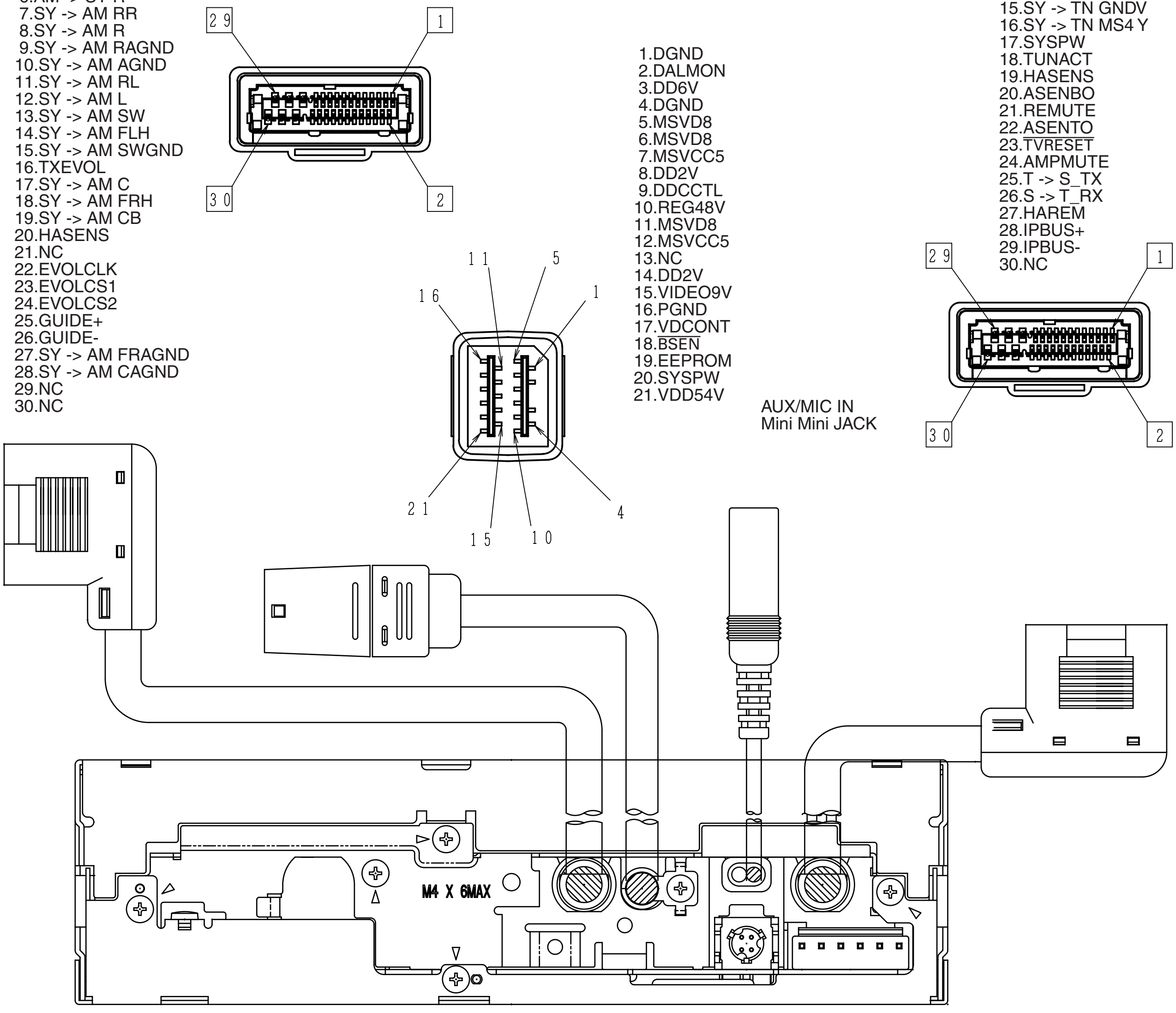
*4 DVD-A compatible model only.
When an error has occurred, only the audio output will be muted but playback operation will continue. Furthermore, acceptance of the user operation will be the same as usual.

*5 AWM (Audio WaterMark): Electronic watermark. Information on the copyright owner or CCI (copy control information) are recorded so that illegally copied discs can be identified.

*6 Notice as an error status will not be given

*7 CPRM(Content Protection for Recordable Media) : A copyright protection technique for digital contents used for re-writable DVD or memory card. (DVD-VR model only)

5.4 CONNECTOR FUNCTION DESCRIPTION



1.SY -> AM FLM
2.AM -> SY L
3.SY -> AM FAGND
4.AM -> SY AGND
5.SY -> AM FRM
6.AM -> SY R
7.SY -> AM RR
8.SY -> AM R
9.SY -> AM RAGND
10.SY -> AM AGND
11.SY -> AM RL
12.SY -> AM L
13.SY -> AM SW
14.SY -> AM FLH
15.SY -> AM SWGND
16.TXEVOL
17.SY -> AM C
18.SY -> AM FRH
19.SY -> AM CB
20.HASENS
21.NC
22.EVOLCLK
23.EVOLCS1
24.EVOLCS2
25.GUIDE+
26.GUIDE-
27.SY -> AM FRAGND
28.SY -> AM CAGND
29.NC
30.NC

1.DGND
2.DALMON
3.DD6V
4.DGND
5.MSVD8
6.MSVD8
7.MSVCC5
8.DD2V
9.DDCCTL
10.REG48V
11.MSVD8
12.MSVCC5
13.NC
14.DD2V
15.VIDEO9V
16.PGND
17.VDCONT
18.BSEN
19.EEPROM
20.SYSPW
21.VDD54V

1.TN -> SY COMPG
2.TN -> SY COMP
3.SY -> TN COMPG
4.SY -> TN COMP
5.TN -> SY GND
6.TN -> SY ISDB Cr
7.SY -> TN GNDV
8.TN -> SY ISDB Cb
9.TN -> SY GNDV
10.TN -> SY ISDB Y
11.SY -> TN GNDV
12.SY -> TN MS4Cr
13.SY -> TN GNDV
14.SY -> TN MS4 Cb
15.SY -> TN GNDV
16.SY -> TN MS4 Y
17.SYSPW
18.TUNACT
19.HASENS
20.ASENBO
21.REMUTE
22.ASENTO
23.TVRESET
24.AMPMUTE
25.T -> S_TX
26.S -> T_RX
27.HAREM
28.IPBUS+
29.IPBUS-
30.NC

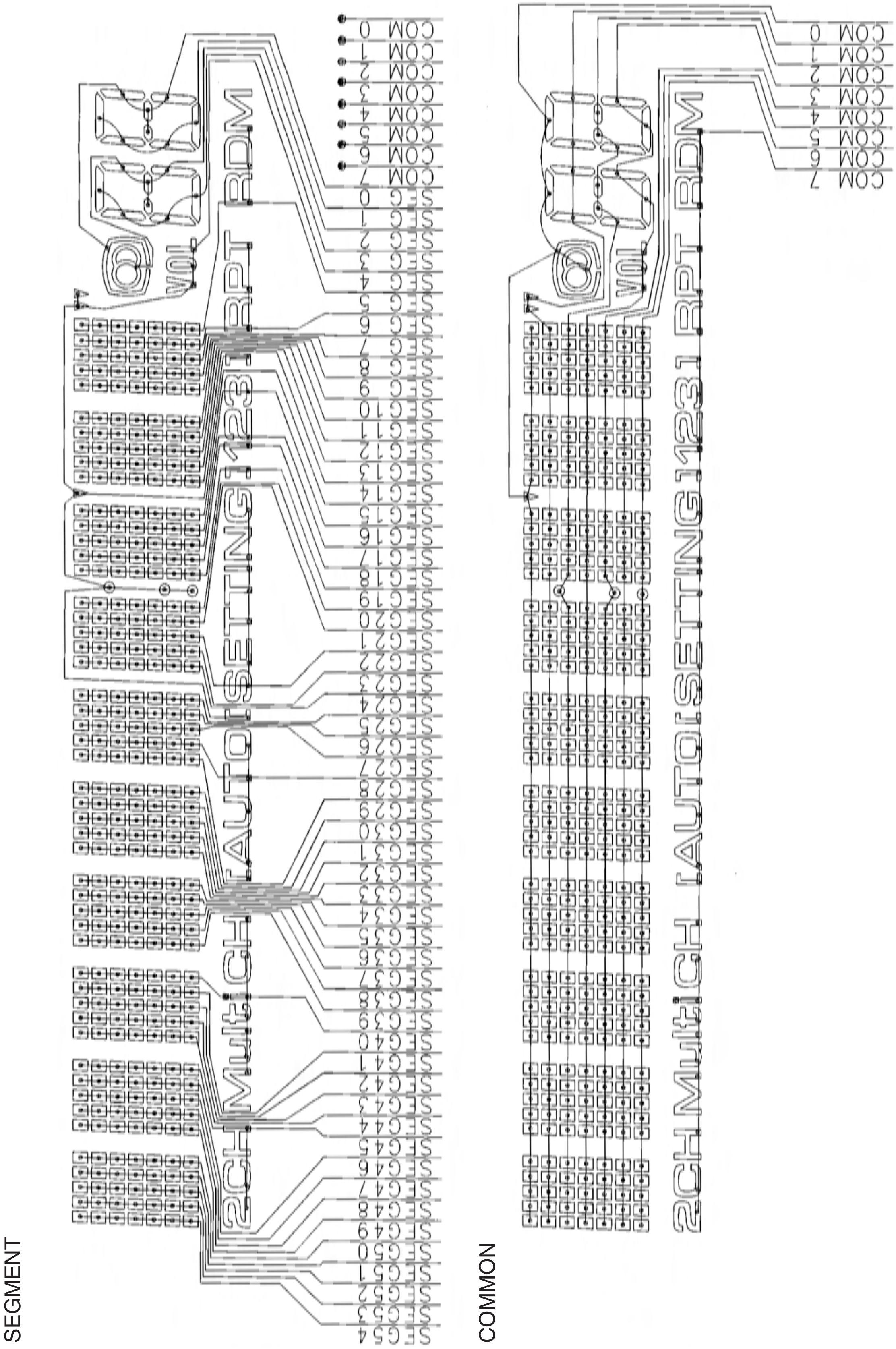
AUX/MIC IN
Mini Mini JACK

OPT IN

1 A.ANT
2 TELIN
3 ILM
4 ACC
5 B.U
6 GND

5.5 DISPLAY

● LCD (CAW1921)


COM 0
COM 1
COM 2
COM 3
COM 4
COM 5
COM 6
COM 7
SEG 0
SEG 1
SEG 2
SEG 3
SEG 4
SEG 5
SEG 6
SEG 7
SEG 8
SEG 9
SEG10
SEG11
SEG12
SEG13
SEG14
SEG15
SEG16
SEG17
SEG18
SEG19
SEG20
SEG21
SEG22
SEG23
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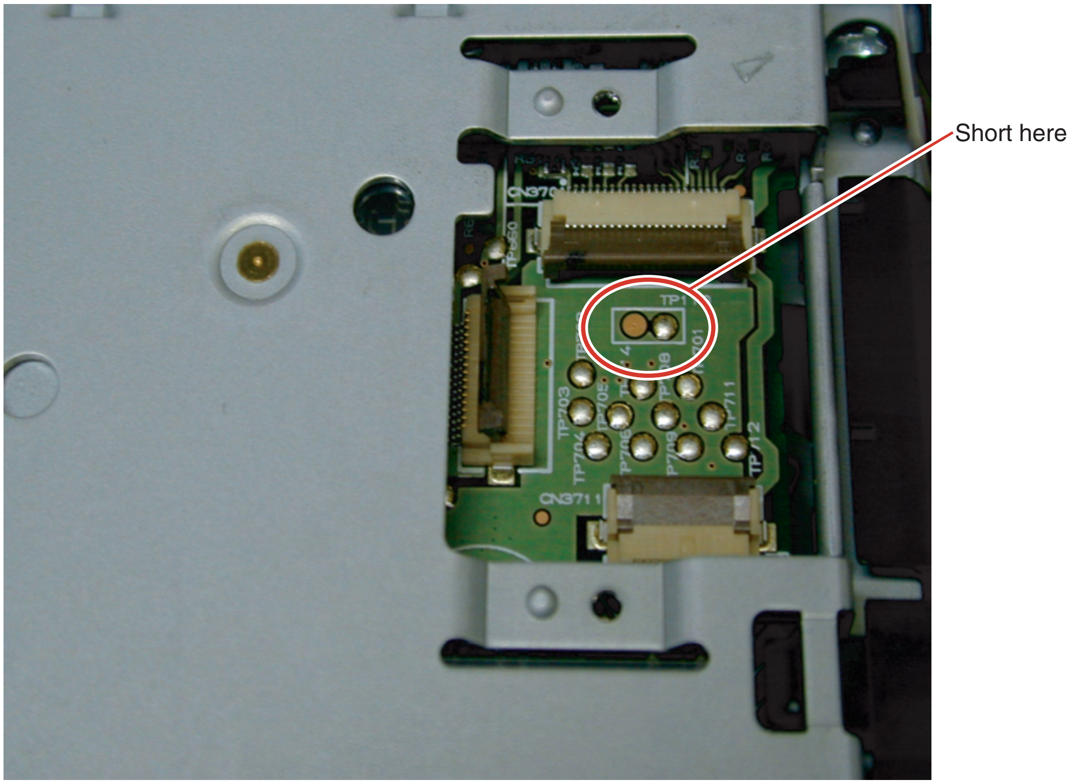
SEG29
SEG30
SEG31
SEG32
SEG33
SEG34
SEG35
SEG36
SEG37
SEG38
SEG39
SEG40
SEG41
SEG42
SEG43
SEG44
SEG45
SEG46
SEG47
SEG48
SEG49
SEG50
SEG51
SEG52
SEG53
SEG54
VOL
2CH MultiCH AUTO SETTING 1231 RPT RDM
SEGMENT
COMMON

6. SERVICE MODE

6.1 H/U INDEPENDENT OPERATION

H/U independent operation

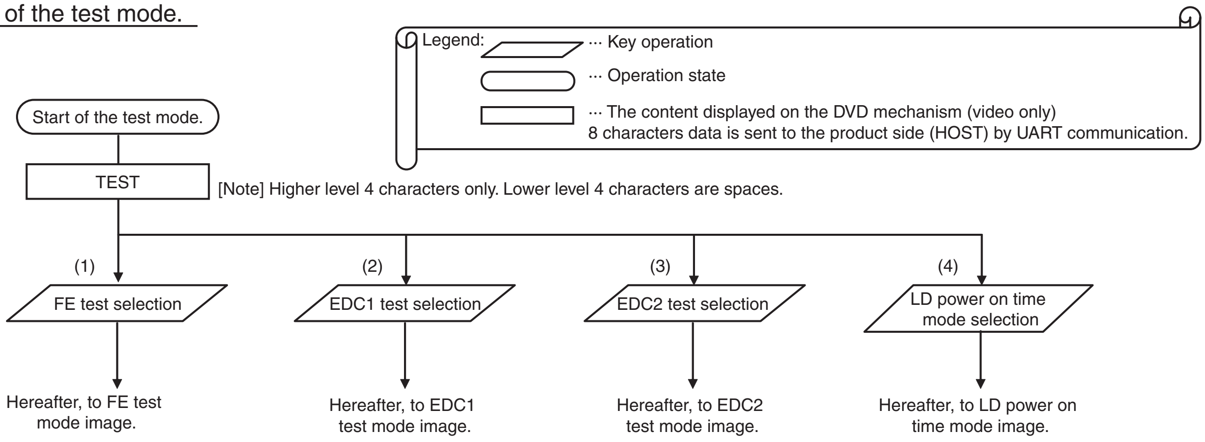

Short here
CN3701
CN3711
TP1
TP703
TP704
TP705
TP706
TP708
TP709
TP711
TP712

Operation becomes possible even if there is no H/A, when it does in this way.
Since TUN is not connected, TUN sauce does not operate.
Please operate sauce by DVD, AUX, etc.

6.2 MECHANISM TESTMODE

Switch position of the remote control unit.
[AVH mode]
(1)-(8) and EJECT is the key of remote control unit.

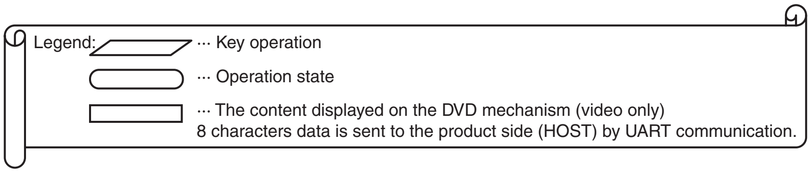
Image of the test mode.

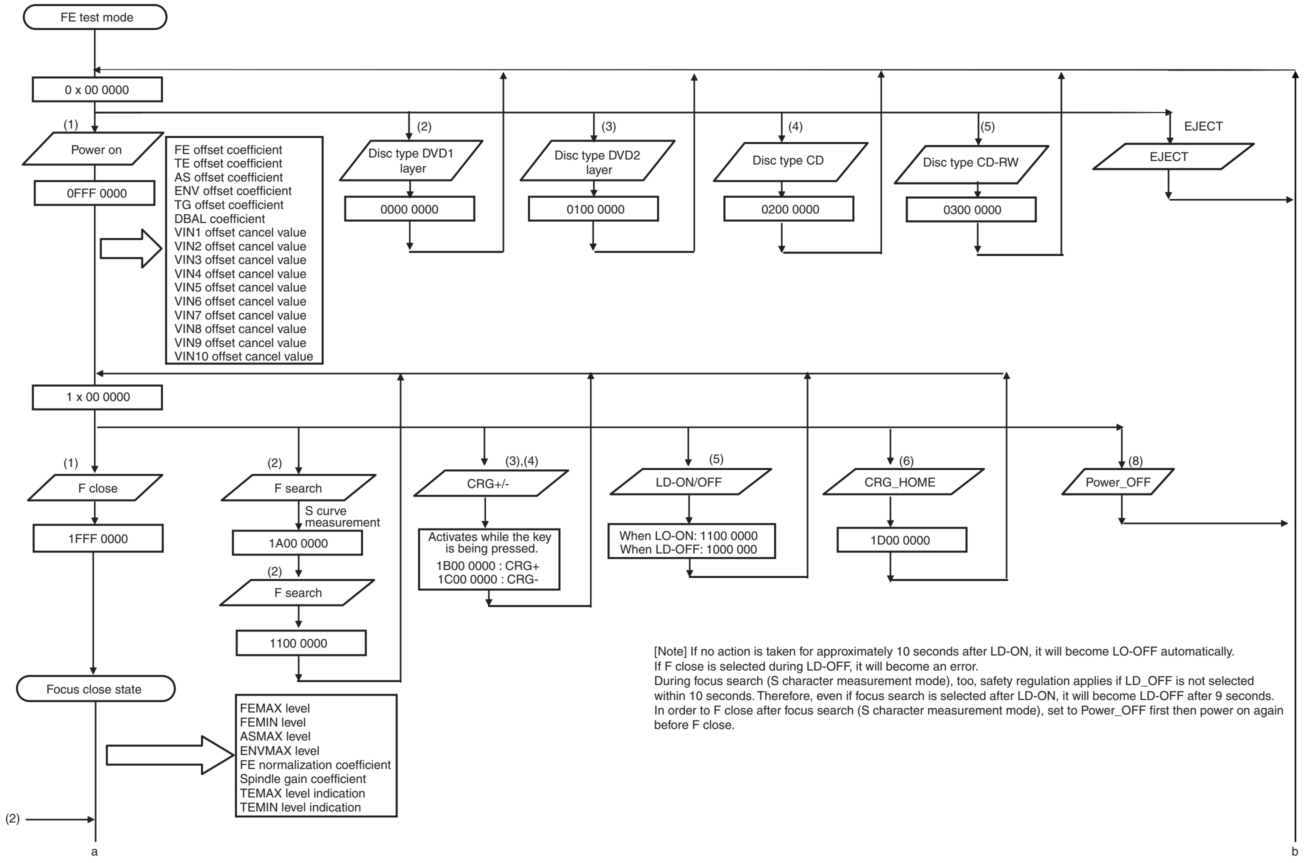

Legend:
··· Key operation
··· Operation state
··· The content displayed on the DVD mechanism (video only)
8 characters data is sent to the product side (HOST) by UART communication.
Start of the test mode.
TEST
(1)
FE test selection
Hereafter, to FE test mode image.
(2)
EDC1 test selection
Hereafter, to EDC1 test mode image.
(3)
EDC2 test selection
Hereafter, to EDC2 test mode image.
(4)
LD power on time mode selection
Hereafter, to LD power on time mode image.

[Note] Higher level 4 characters only. Lower level 4 characters are spaces.

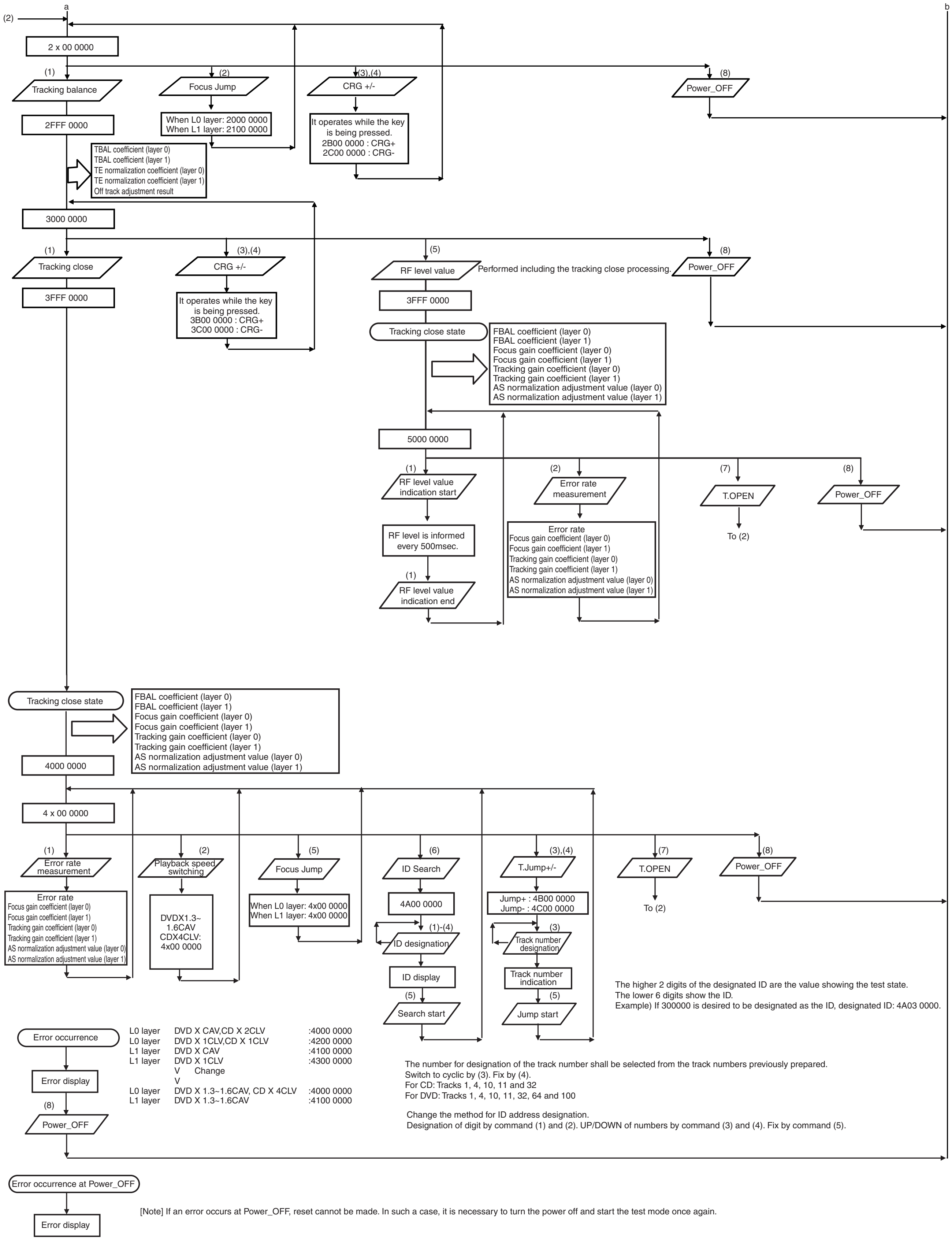
[Note] In order to move on to another test after selecting a test (FE/EDC1/EDC2), it is necessary to restart the DVD mechanism in the test mode.

Image of the front end test mode.


Legend:
··· Key operation
··· Operation state
··· The content displayed on the DVD mechanism (video only)
8 characters data is sent to the product side (HOST) by UART communication.


FE test mode
0 x 00 0000
(1)
Power on
0FFF 0000
FE offset coefficient
TE offset coefficient
AS offset coefficient
ENV offset coefficient
TG offset coefficient
DBAL coefficient
VIN1 offset cancel value
VIN2 offset cancel value
VIN3 offset cancel value
VIN4 offset cancel value
VIN5 offset cancel value
VIN6 offset cancel value
VIN7 offset cancel value
VIN8 offset cancel value
VIN9 offset cancel value
VIN10 offset cancel value
(2)
Disc type DVD1 layer
0000 0000
(3)
Disc type DVD2 layer
0100 0000
(4)
Disc type CD
0200 0000
(5)
Disc type CD-RW
0300 0000
EJECT
EJECT
1 x 00 0000
(1)
F close
1FFF 0000
Focus close state
FEMAX level
FEMIN level
ASMAX level
ENVMAX level
FE normalization coefficient
Spindle gain coefficient
TEMAX level indication
TEMIN level indication
(2)
a
(2)
F search
S curve measurement
1A00 0000
(2)
F search
1100 0000
(3),(4)
CRG+/-
Activates while the key is being pressed.
1B00 0000 : CRG+
1C00 0000 : CRG-
(5)
LD-ON/OFF
When LO-ON: 1100 0000
When LD-OFF: 1000 000
(6)
CRG_HOME
1D00 0000
(8)
Power_OFF
b

[Note] If no action is taken for approximately 10 seconds after LD-ON, it will become LO-OFF automatically.
If F close is selected during LD-OFF, it will become an error.
During focus search (S character measurement mode), too, safety regulation applies if LD_OFF is not selected within 10 seconds. Therefore, even if focus search is selected after LD-ON, it will become LD-OFF after 9 seconds.
In order to F close after focus search (S character measurement mode), set to Power_OFF first then power on again before F close.


a
b
(2)
2 x 00 0000
(1)
Tracking balance
2FFF 0000
TBAL coefficient (layer 0)
TBAL coefficient (layer 1)
TE normalization coefficient (layer 0)
TE normalization coefficient (layer 1)
Off track adjustment result
(2)
Focus Jump
When L0 layer: 2000 0000
When L1 layer: 2100 0000
(3),(4)
CRG +/-
It operates while the key is being pressed.
2B00 0000 : CRG+
2C00 0000 : CRG-
(8)
Power_OFF
3000 0000
(1)
Tracking close
3FFF 0000
(3),(4)
CRG +/-
It operates while the key is being pressed.
3B00 0000 : CRG+
3C00 0000 : CRG-
(5)
RF level value
Performed including the tracking close processing.
(8)
Power_OFF
3FFF 0000
Tracking close state
FBAL coefficient (layer 0)
FBAL coefficient (layer 1)
Focus gain coefficient (layer 0)
Focus gain coefficient (layer 1)
Tracking gain coefficient (layer 0)
Tracking gain coefficient (layer 1)
AS normalization adjustment value (layer 0)
AS normalization adjustment value (layer 1)
5000 0000
(1)
RF level value indication start
RF level is informed every 500msec.
(1)
RF level value indication end
(2)
Error rate measurement
Error rate
Focus gain coefficient (layer 0)
Focus gain coefficient (layer 1)
Tracking gain coefficient (layer 0)
Tracking gain coefficient (layer 1)
AS normalization adjustment value (layer 0)
AS normalization adjustment value (layer 1)
(7)
T.OPEN
To (2)
(8)
Power_OFF
Tracking close state
FBAL coefficient (layer 0)
FBAL coefficient (layer 1)
Focus gain coefficient (layer 0)
Focus gain coefficient (layer 1)
Tracking gain coefficient (layer 0)
Tracking gain coefficient (layer 1)
AS normalization adjustment value (layer 0)
AS normalization adjustment value (layer 1)
4000 0000
4 x 00 0000
(1)
Error rate measurement
Error rate
Focus gain coefficient (layer 0)
Focus gain coefficient (layer 1)
Tracking gain coefficient (layer 0)
Tracking gain coefficient (layer 1)
AS normalization adjustment value (layer 0)
AS normalization adjustment value (layer 1)
(2)
Playback speed switching
DVDX1.3~1.6CAV
CDX4CLV:
4x00 0000
(5)
Focus Jump
When L0 layer: 4x00 0000
When L1 layer: 4x00 0000
(6)
ID Search
4A00 0000
(1)-(4)
ID designation
ID display
(5)
Search start
(3),(4)
T.Jump+/-
Jump+ : 4B00 0000
Jump- : 4C00 0000
(3)
Track number designation
Track number indication
(5)
Jump start
(7)
T.OPEN
To (2)
(8)
Power_OFF
Error occurrence
Error display
(8)
Power_OFF
Error occurrence at Power_OFF
Error display

L0 layer	DVD X CAV,CD X 2CLV	:4000 0000
L0 layer	DVD X 1CLV,CD X 1CLV	:4200 0000
L1 layer	DVD X CAV	:4100 0000
L1 layer	DVD X 1CLV	:4300 0000
	V Change V	
L0 layer	DVD X 1.3~1.6CAV, CD X 4CLV	:4000 0000
L1 layer	DVD X 1.3~1.6CAV	:4100 0000

The higher 2 digits of the designated ID are the value showing the test state.
The lower 6 digits show the ID.
Example) If 300000 is desired to be designated as the ID, designated ID: 4A03 0000.

The number for designation of the track number shall be selected from the track numbers previously prepared.
Switch to cyclic by (3). Fix by (4).
For CD: Tracks 1, 4, 10, 11 and 32
For DVD: Tracks 1, 4, 10, 11, 32, 64 and 100

Change the method for ID address designation.
Designation of digit by command (1) and (2). UP/DOWN of numbers by command (3) and (4). Fix by command (5).

[Note] If an error occurs at Power_OFF, reset cannot be made. In such a case, it is necessary to turn the power off and start the test mode once again.

EDC. Image of the test mode

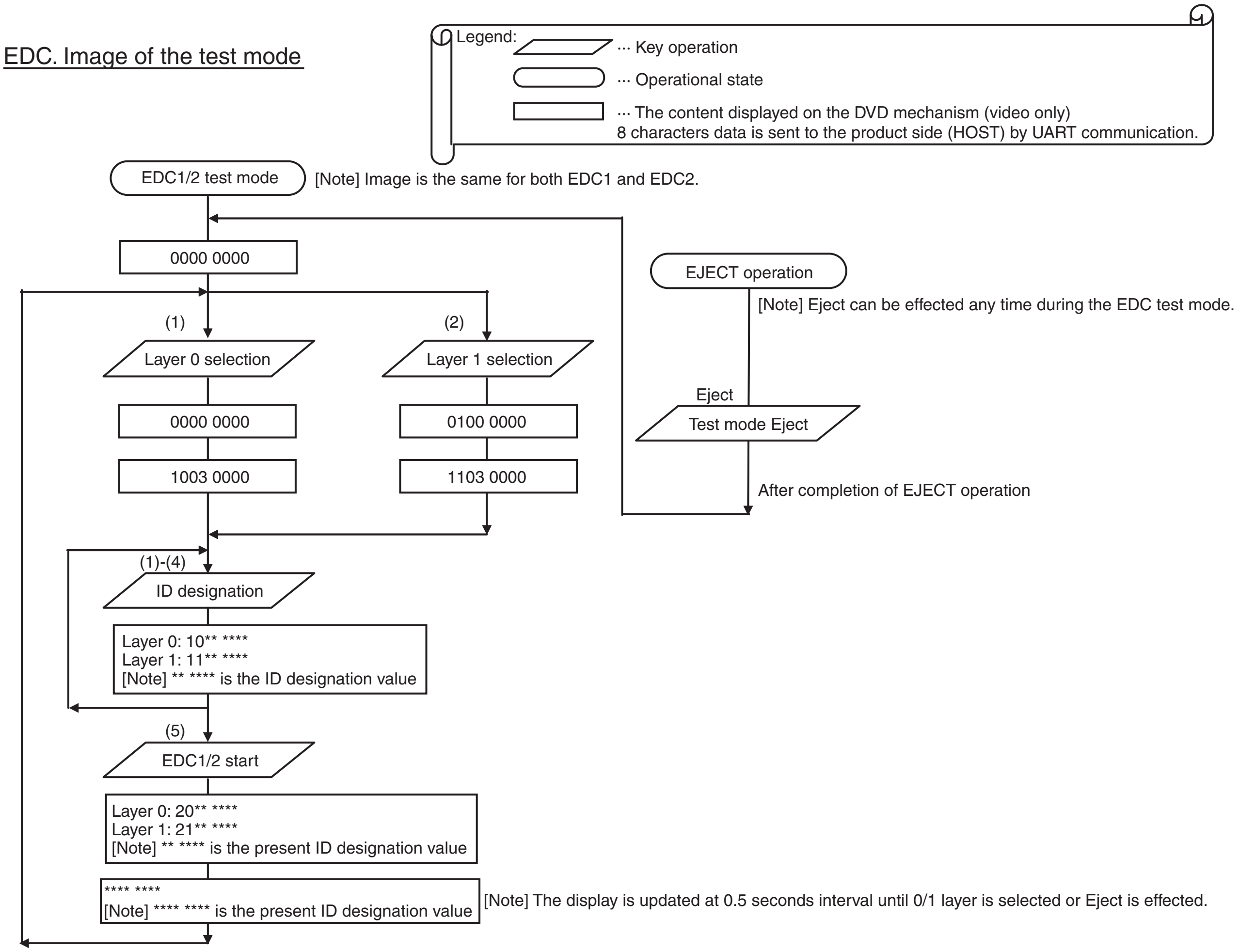
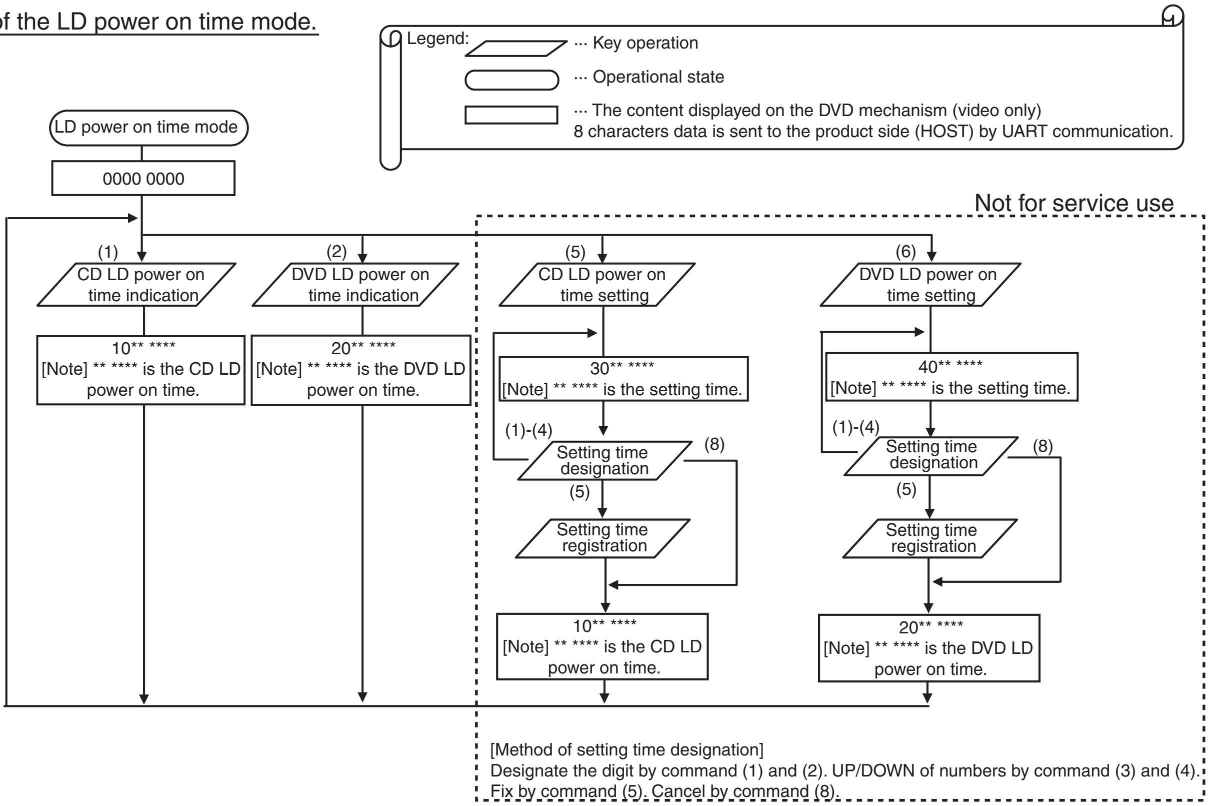

Legend:
··· Key operation
··· Operational state
··· The content displayed on the DVD mechanism (video only)
8 characters data is sent to the product side (HOST) by UART communication.
EDC1/2 test mode
[Note] Image is the same for both EDC1 and EDC2.
0000 0000
EJECT operation
[Note] Eject can be effected any time during the EDC test mode.
(1)
(2)
Layer 0 selection
Layer 1 selection
0000 0000
0100 0000
1003 0000
1103 0000
Eject
Test mode Eject
After completion of EJECT operation
(1)-(4)
ID designation
Layer 0: 10** ****
Layer 1: 11** ****
[Note] ** **** is the ID designation value
(5)
EDC1/2 start
Layer 0: 20** ****
Layer 1: 21** ****
[Note] ** **** is the present ID designation value
**** ****
[Note] **** **** is the present ID designation value
[Note] The display is updated at 0.5 seconds interval until 0/1 layer is selected or Eject is effected.

Image of the LD power on time mode.


Legend:
··· Key operation
··· Operational state
··· The content displayed on the DVD mechanism (video only)
8 characters data is sent to the product side (HOST) by UART communication.
LD power on time mode
0000 0000
Not for service use
(1)
CD LD power on time indication
(2)
DVD LD power on time indication
(5)
CD LD power on time setting
(6)
DVD LD power on time setting
10** ****
[Note] ** **** is the CD LD power on time.
20** ****
[Note] ** **** is the DVD LD power on time.
30** ****
[Note] ** **** is the setting time.
40** ****
[Note] ** **** is the setting time.
(1)-(4)
Setting time designation
(8)
(5)
Setting time registration
(1)-(4)
Setting time designation
(8)
(5)
Setting time registration
10** ****
[Note] ** **** is the CD LD power on time.
20** ****
[Note] ** **** is the DVD LD power on time.

[Method of setting time designation]
Designate the digit by command (1) and (2). UP/DOWN of numbers by command (3) and (4).
Fix by command (5). Cancel by command (8).

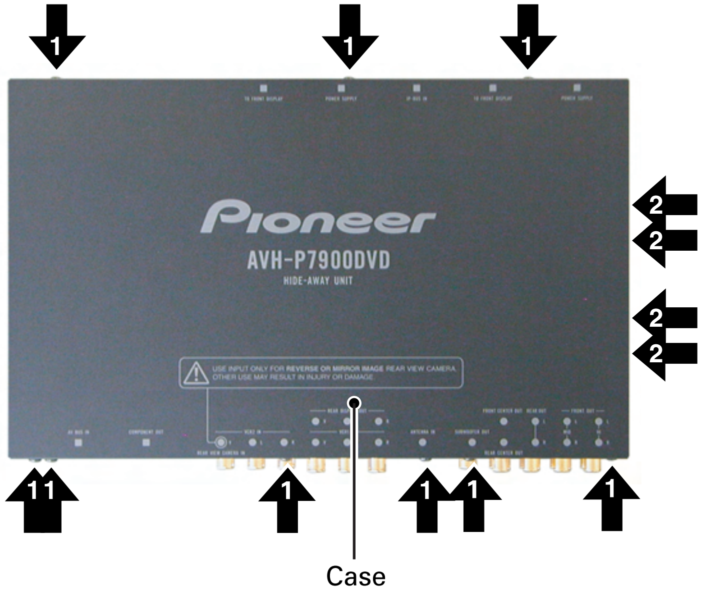
[Note] If the power on time is 999999 hours or more, it is always reported as 999999 hours.
[Note] If the power on time is "*E** ****", the value may not be correct due to the life of the flash memory.

7. DISASSEMBLY

● Removing the Case (Fig.1)

1 Remove the nine screws.

2 Remove the four screws and then remove the Case.


1
1
1
Pioneer
AVH-P7900DVD
HIDE-AWAY UNIT
2
2
2
2
1
1
1
1
1
1

Case

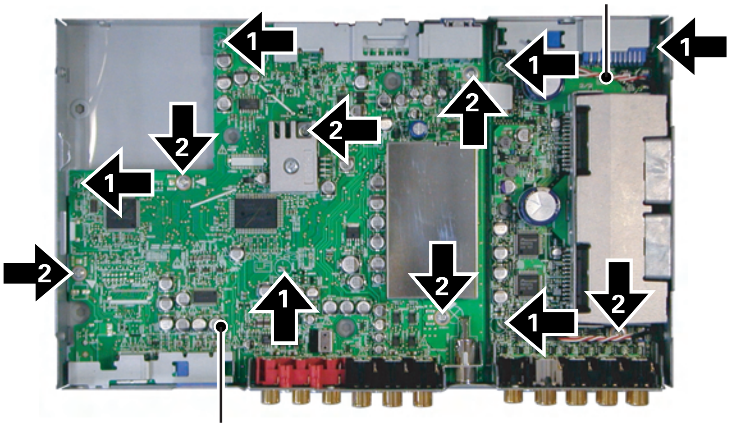
Fig.1

● Removing the Amp Unit and the Tuner Selector Unit (Fig.2)

1 Straighten the tabs at six locations indicated.

2 Remove the six screws and then remove the Amp Unit and the Tuner Selector Unit.

Amp Unit


1
1
1
2
2
2
1
2
1
2
1
2

Tuner Selector Unit

Fig.2

● How to Separate the Upper Case and the Lower Case (Fig.3)

1 While the unit is being placed upside down, insert Tweezers or the like into the slit, slide the Tweezers in the direction as indicated by an arrow, and open the Flap of the Detach Grille.

2 Remove the Detach Grille.

Caution:
Unless the Flap is opened, the Detach Grille cannot be removed.

3 Remove the screws.

Be careful not to insert the Tweezers too deep as you may damage the PCB.

4 While making the Lower Case stand, straighten the tabs at three locations indicated, and then remove the Holder.

5 Remove the four screws and then remove the Bracket.

6 Turn the Gear clockwise so that the Panel Unit can be seen. (Refer to Fig. 4)

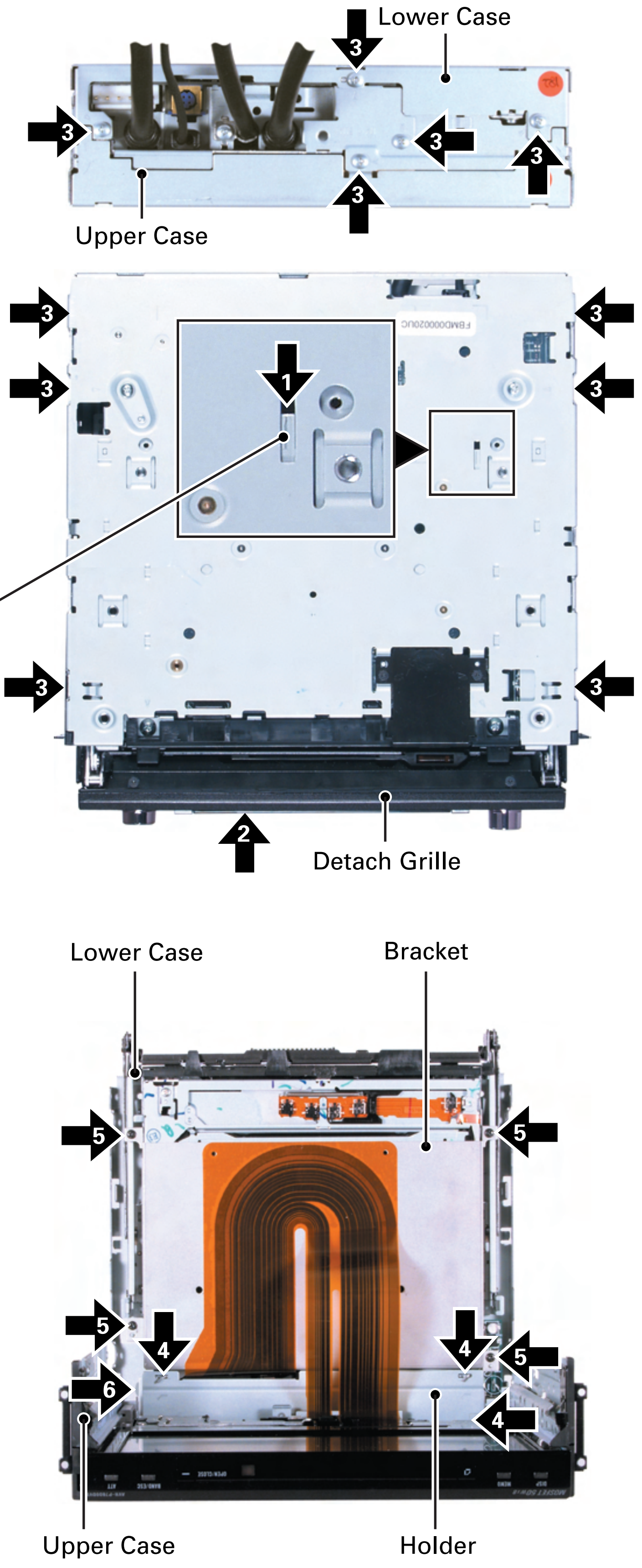

Lower Case
3
3
3
3
3
Upper Case
3
3
1
3
3
3
3
2
Detach Grille
Lower Case
Bracket
5
5
5
4
4
5
6
4
Upper Case
Holder

Fig.3

● Removing the DVD Mechanism Module (Fig.4)

1 Remove the two screws.

2 Remove the two screws.
Remove the cover.
Remove the Panel Unit.

3 Remove the four screws.

Caution:
Be careful as the DVD Mechanism Module will drop down if the screws are removed with the product being held upside down.

Note) Be careful not to damage a screen.

4 Tilt the bracket toward the Upper Case.
Disconnect the two connectors and then remove the DVD Mechanisum Module.

5 Disconnect the two connectors.

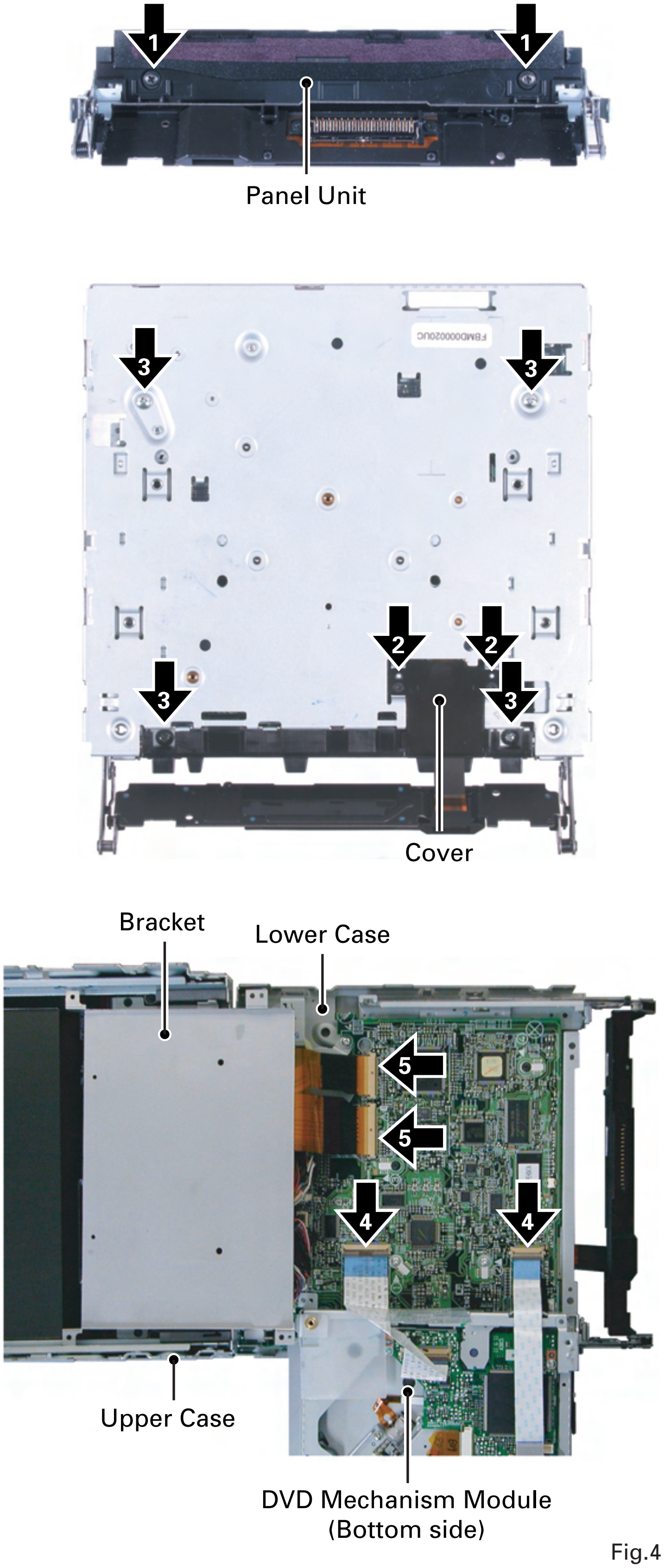

1
1
Panel Unit
3
3
2
2
3
3
Cover
Bracket
Lower Case
5
5
4
4
Upper Case
DVD Mechanism Module
(Bottom side)

Fig.4

● Removing the DVD Mother Unit (Fig.5)

1. Remove the two screws and then disconnect the connector.
2. Disconnect the connector.
3. Straighten the tabs at four locations indicated.
4. Remove the four screws and then remove the DVD Mother Unit.

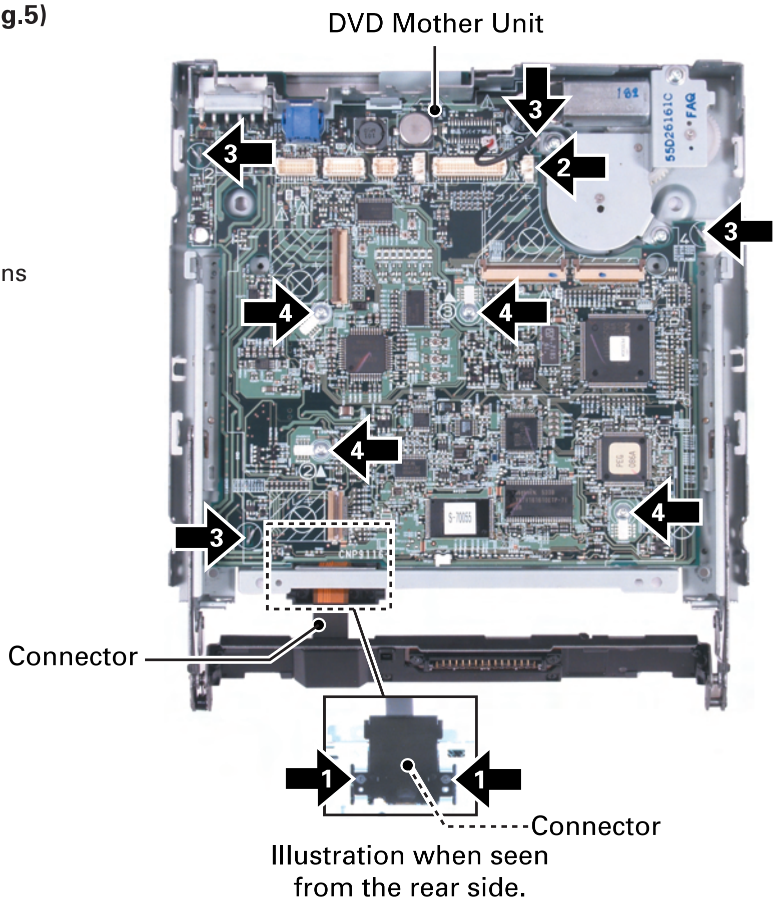

DVD Mother Unit
3
3
2
3
4
4
4
3
4
Connector
1
1
Connector
Illustration when seen from the rear side.

Fig.5

● Removing the Lighting Conductor (Fig.6)

1. Remove the four screws.
2. Remove the Hooks at two locations while pushing the thin section of the Grill, and then remove the Grill and the Cover.
3. Push the tip of the Knob slightly toward the inner side as indicated by an arrow, and then remove the Lighting Conductor.

Refer to "1. SERVICE PRECAUTIONS" to assemble.

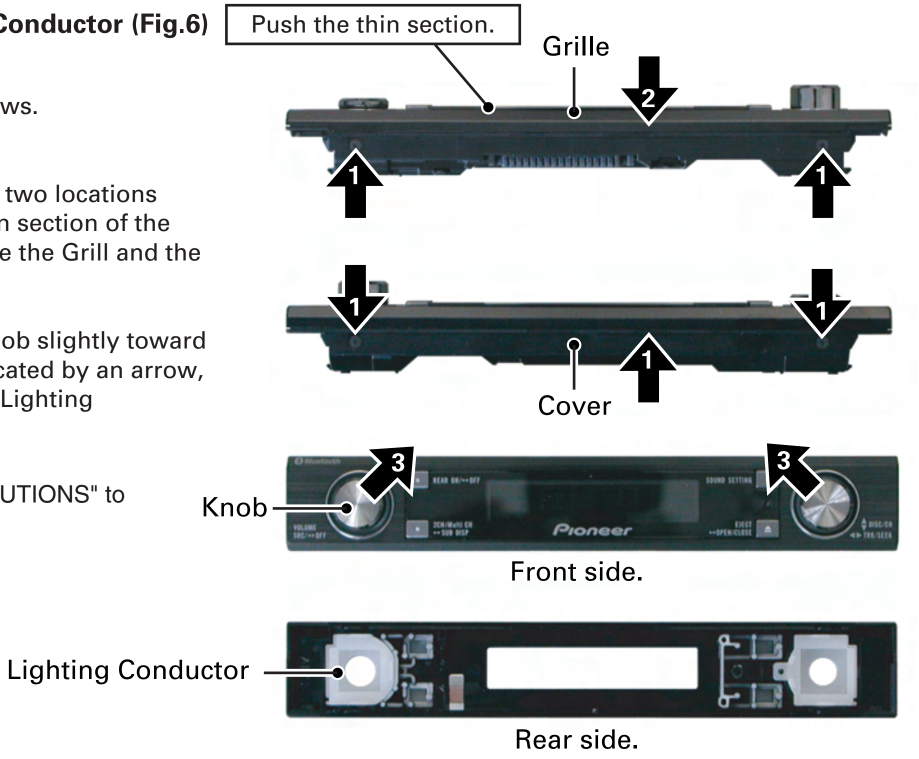

Push the thin section.
Grille
2
1
1
1
1
1
Cover
3
3
Knob
Front side.
Lighting Conductor
Rear side.

Fig.6

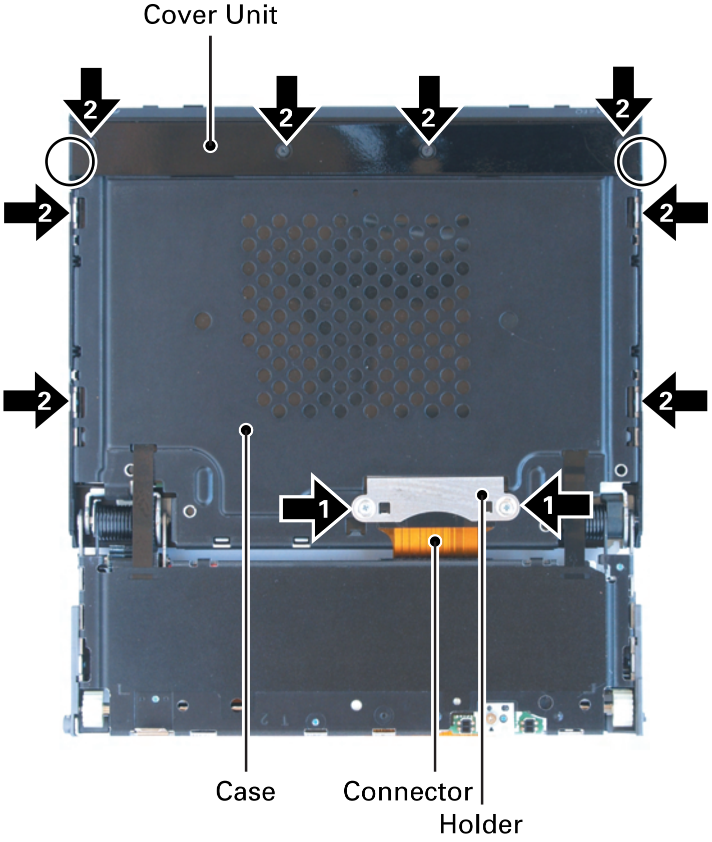
● Removing the Monitor Unit (Fig.7)

1 Remove the two screws and then remove the Holder.

2 Remove the eight screws and then remove the Cover Unit and the Case.

Disconnect the connector.

Note)
When you remove a cover unit,
be careful of the hook of a circle portion.


Cover Unit
2
2
2
2
2
2
2
2
1
1
Case
Connector
Holder

3 Disconnect the four connectors.

4 Straighten the tabs at two locations indicated.

5 Remove the screw and then remove the Monitor Unit.

Note)
When you remove a monitor unit,
be careful of the hook of a circle portion.

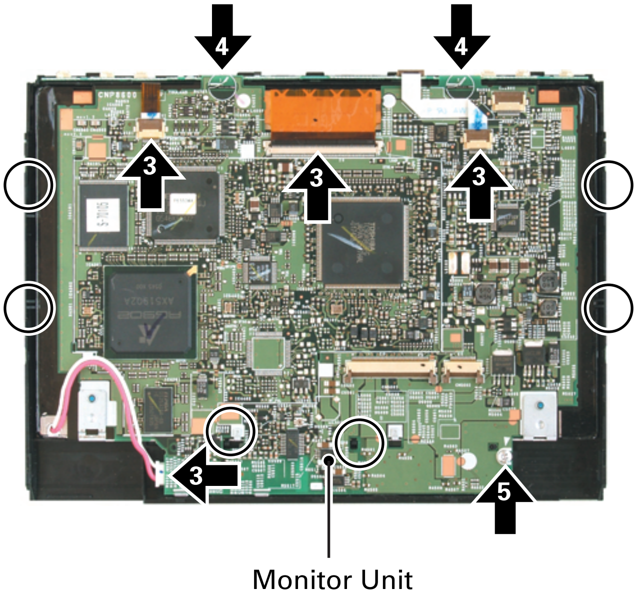

4
4
3
3
3
3
5
Monitor Unit

Fig.7

● Precautions for Assembling the Monitor (Fig.8)

If you try to install the monitor side drive mechanism to the Lower Case (mother side) with the Monitor being fully extending out, the Monitor cannot be housed completely due to its structure. Therefore, assemble the monitor side drive mechanism and the Lower Case (mother side) with the mechanical unit being housed inside the Upper Case at least 5 cm or so.

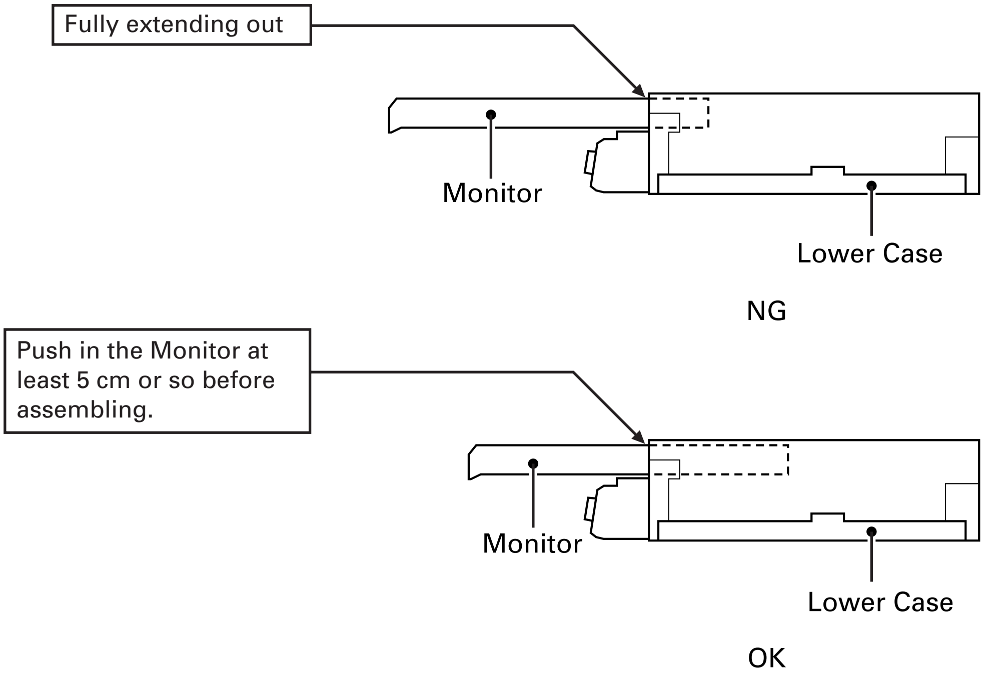

Fully extending out
Monitor
Lower Case
NG
Push in the Monitor at least 5 cm or so before assembling.
Monitor
Lower Case
OK

Fig.8

● How to hold the mechanism section (Fig.9)

1. Hold the main frame and the top frame.
2. As the mechanical strength of the front part of the top frame is not strong, do not hold this part.
3. Do not touch the switches provided on the top face of the mechanism section.
4. Be careful not to pull the flexible PCB on the side face.

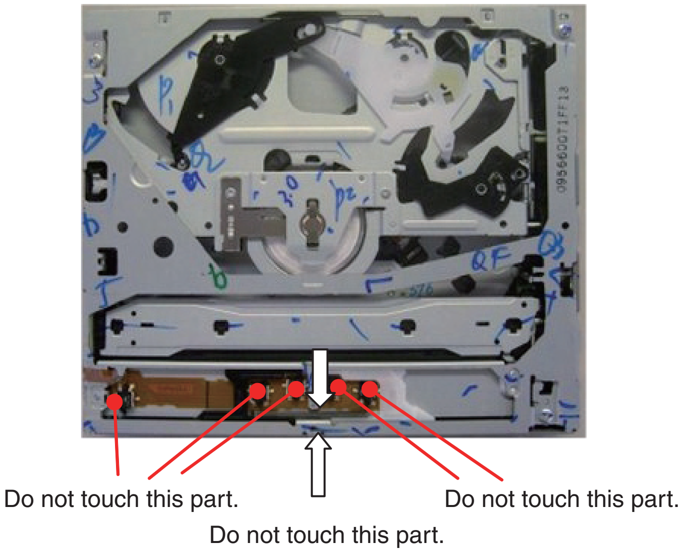
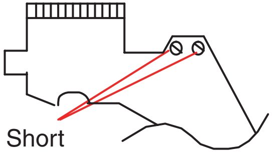

Do not touch this part.
Do not touch this part.
Do not touch this part.

Fig.9

● How to remove the module PCB (Fig.10, Fig.11)

1. Put the mechanism section in locked state (disc load standby position).
2. Hold the mechanism module with its top face down.
3. Make the lands at 2 locations on the pick up flexible PCB short.
4. Disconnect the connectors of the pick up flexible PCB and the SPDL flexible PCB.
   (Be sure to disconnect the connectors as the flexible PCB will be damaged if the PCB is removed without removing the flexible PCB.)
5. Remove the solder joint of the lead wire of the load motor and the clamp SW.
6. Remove the two screws, and then remove the module PCB.
   (Lift up point A slightly and remove it toward B direction. Be careful as the point C is connected with a flexible PCB.)
7. Disconnect the connector of the 8-12 detection flexible PCB from the PCB.

Fig.10



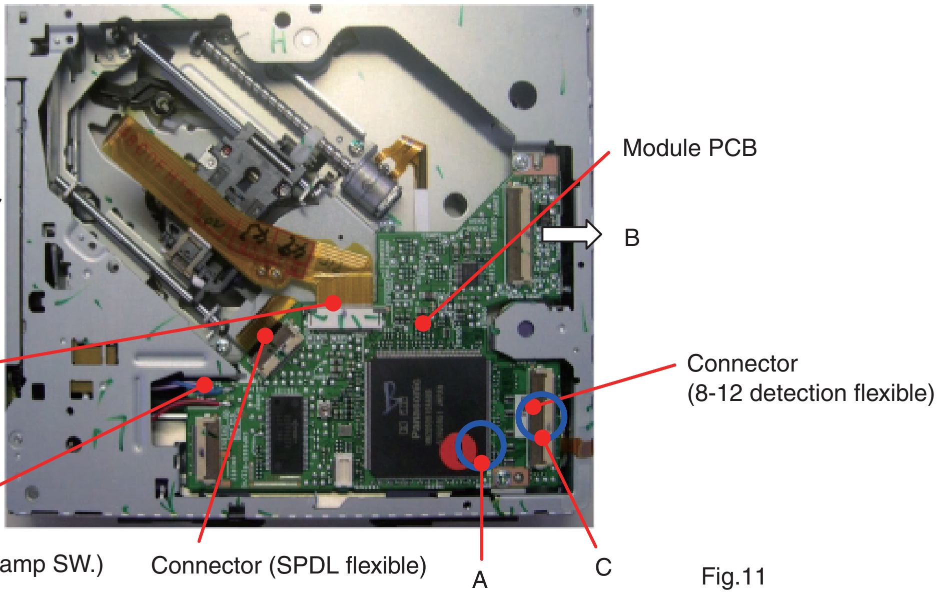

Module PCB
B
Connector
(pick up flexible)
Connector
(8-12 detection flexible)
Solder land
(load motor, lead wire of the clamp SW.)
Connector (SPDL flexible)
A
C

Fig.11

● How to remove the CRG motor assy (Fig.12)

1. Remove the module PCB according to the instructions in ìHow to remove the module PCBî.
2. Remove the Mylar tape.
3. Remove the flexible PCB of the CRG motor from the connector of the spindle motor.
4. Remove the two screws, and then remove the CRG motor assy.

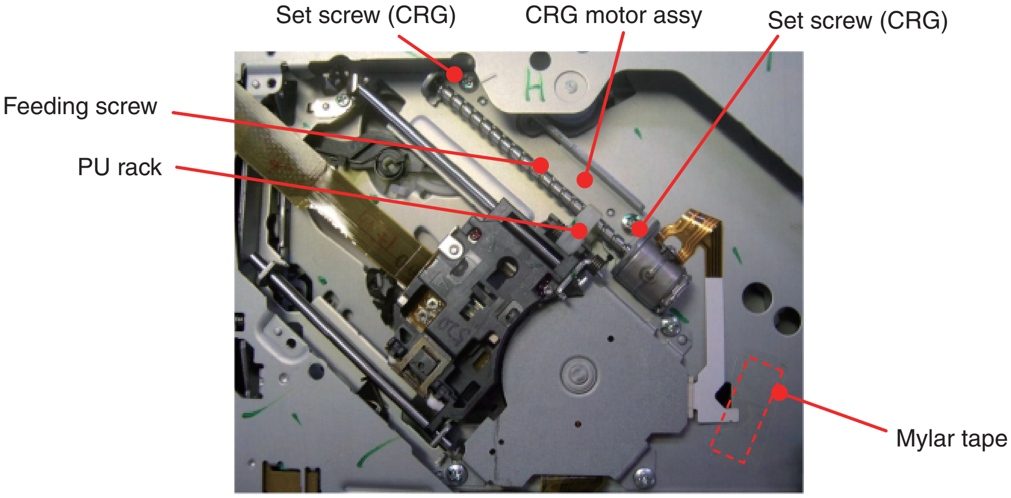

Set screw (CRG)
CRG motor assy
Set screw (CRG)
Feeding screw
PU rack
Mylar tape

Fig.12

● How to remove the PU unit (Fig 13)

1. Remove the module PCB according to the instructions in "How to remove the module PCB".
2. Hang the main shaft holding spring to the CRG chassis temporary hanger.
3. Remove the CRG motor assy according to the instructions in "How to remove the CRG motor assy".
4. Remove the holding plate spring of the main shaft.
5. While lifting up the tip of the pick up rack, slide the main shaft, and remove the PU unit.

(Note) When mounting the PU unit again, make sure to do the adjustments of the devices mounted thereon according to the descriptions of the service manual. Furthermore, make sure to hang the main shaft holding spring permanently.

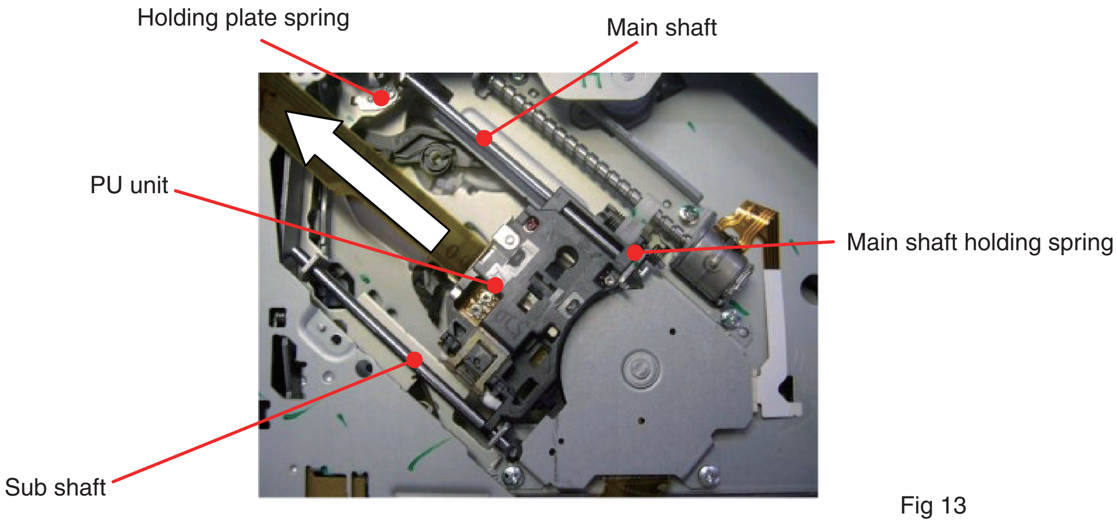
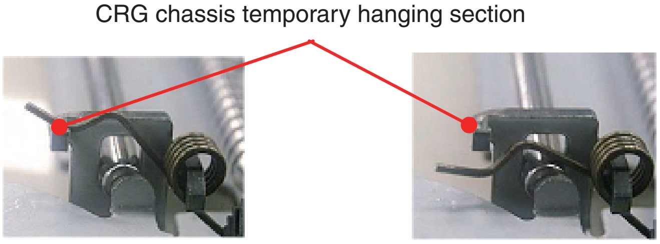

Holding plate spring
Main shaft
PU unit
Main shaft holding spring
Sub shaft

Fig 13


CRG chassis temporary hanging section

Temporary hanging

Permanent hanging

8. EACH SETTING AND ADJUSTMENT

8.1 DVD ADJUSTMENT

1) Precautions

This product uses 5 V and 3.3 V as standard voltages. The electrical potential that is the reference for signals, is not GND, but VREF (approximately 2.2 V) and VHALF (approximately 1.65 V).

During product adjustments, if the reference voltage is mistakenly taken as GND, and a grounding contact is made, not only would it be impossible to measure the accurate electrical potential, but also the servo motor would malfunction, resulting in the application of a strong impact on the pick up. The following precautionary measures should be strictly adhered to, in order to avoid such problems.

The reference voltage and GND should not be confused when using the minus probe of a measurement device. When an oscilloscope is being used special care should be taken to make sure that the reference voltage is not connected to the probe of ch1 (on the minus side), while the probe of ch2 (on the minus side), is connected to GND. Further, since the body frame of most measurement devices have the same electrical potential as the minus side of the probe, the body frame of the measurement device should be set to floating ground.

If the reference voltage is connected to GND by mistake, turn the regulator OFF immediately, or turn the power OFF.

- Remove the filters and wires used for measurements only after the regulator has been turned OFF.
- For stable circuit operation, keep the mechanism operating for about one minute or more after the regulator is turned on.
- Whenever the product is in the test mode, the software will not take any protective action. For this reason, special care should be taken to make sure that no mechanical or electrical shock could be applied to the product when taking measurements in the test mode.
- Whenever the EJECT key is pressed to eject the disk, no other keys, other than the EJECT key, should be pressed until the disk eject action has been completed.
- If the product hangs up turn the power OFF immediately.
- Laser didoes may be damaged, if the volume switch for the laser power adjustment of the pick up unit, is turned.

Attention)

- Test mode starting procedure
  Reset start while pressing the SOURCE and SETTING keys together.
- Test mode stopping procedure
  Reset or ACC OFF-ON.

● SKEW adjustment

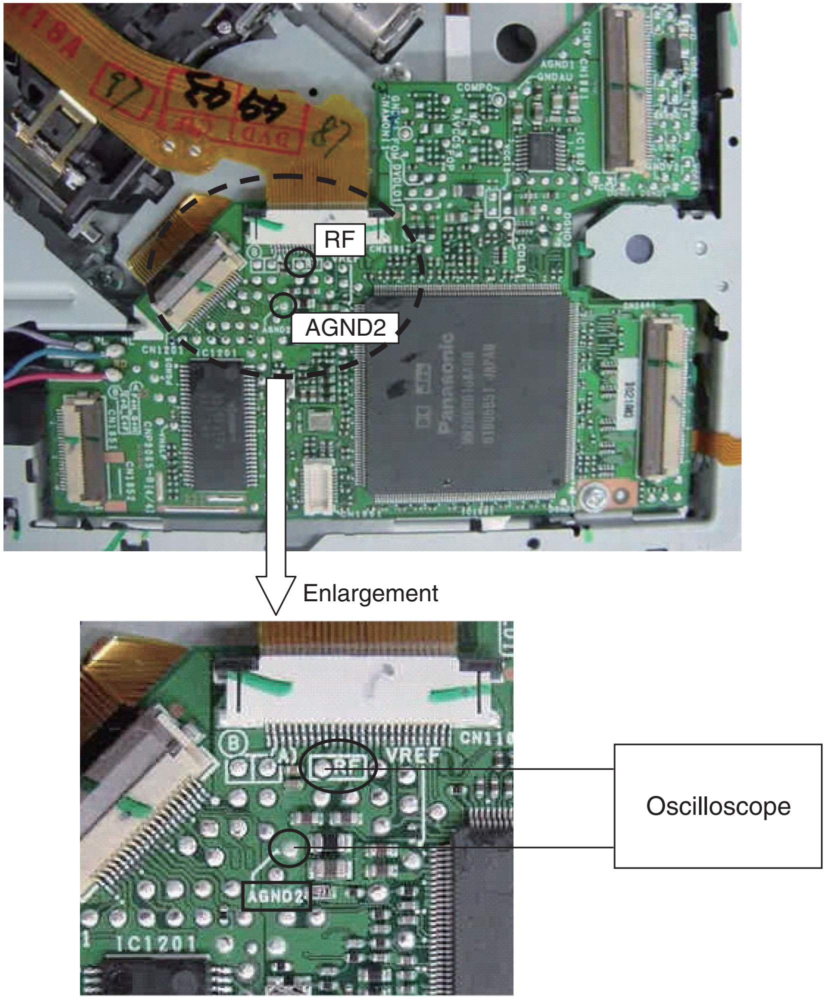
When one of the following replacements has taken place, SKEW adjustment for the pick up will be required.
(1) Replacement of the pick up unit
(2) Replacement of the spindle motor
(3) Replacement of the carriage chassis
(4) Replacement of the main shaft of the pick up unit
(5) Replacement of the sub shaft of the pick up unit

- Measurement equipment and tools/jigs: Oscilloscope
  Driver for SKEW adjustment → TORX driver (T2) (GGK1095)
  Bond for fixing the SKEW (GEM1033)
  Bond for locking the screw (Locking agents(1401M : produced by THREE BOND))

- Disc used: GGV1018

- Measurement reference: AGND2
- Measurement point: RF

- Connection drawing
  DVD core unit



Symptom in case the adjustment is not adequate: Worsening of the error rate 10^{-3}
(Normally 10^{-4} or less.)
Large RF jitter
RF waveform distortion
Tracking drawing/Unstable servo

* Caution: Do not look into the laser light during adjustment.

There are two methods for adjustment, a method whereby the adjustment is made while monitoring the RF waveform using the oscilloscope (method ①) and a method whereby the adjustment is made while checking the RF level in value by OSD (method ②).

The adjustment procedure is shown below. Refer to the paragraph for the service test mode regarding entering of the test mode and the operation procedure.

Adjustment procedure:

1. Turn the DVD mechanism module upside down so that the pick up can be adjusted.
   When the module is turned upside down, there is a possibility that the disc is rubbed.
   So, first place a coin with the thickness of approximately 1.5 mm on a desk, and set the module upside down in a way that section ① in the illustration below comes right above the coin.

2. Install the pick up. (Refer to the section regarding removal of the pick up from the mechanism unit.)
   As for the precautions in handling the pick up, refer to the precautions in handling the PU as described below.

3. Method ①:
   Connect the oscilloscope by referring to the connection drawing so that the RF signal can be monitored with AGND2 as the reference.
   Method ②:
   There is no need for setting of any equipment. Proceed to step 4.

4. Turn the power ON, and load the disc for adjustment.(GGV1018)

5. After setting the disc type to DVD layer 1 in the front end test mode, turn the power ON, and move the pick up to the inner periphery. (CRG - Home)

6. Turn the LD ON.

7. Set to focus close, and make auto adjustment for all items under that state, then set to tracking close.
   And make auto adjustment for all items under that state as well.

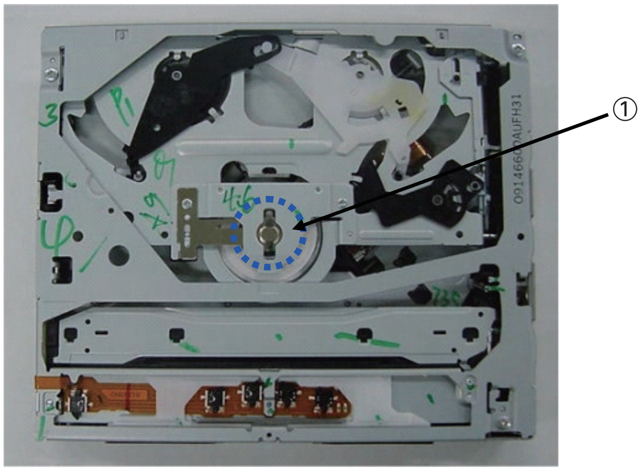
8. Make an intermediate periphery (ID: 100 000) search, and move the PU to intermediate periphery.

9. Method ①:
   Proceed to step 10.
   Method ②:
   After setting to Tracking Open, make all auto adjustments, and set to Tracking Close this time with a command that can be RF displayed. Make auto adjustment for all items under that state as well.

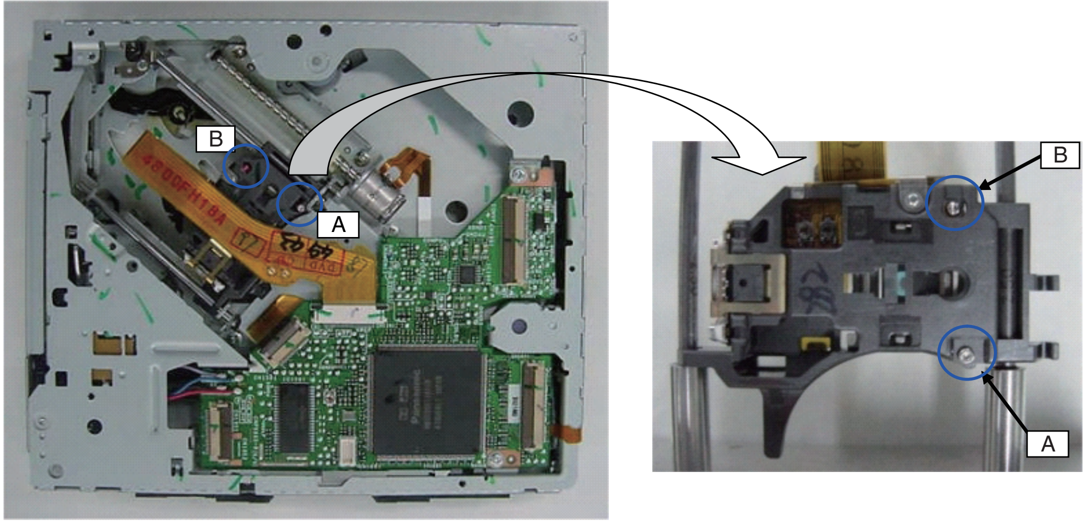
10. Use TORX driver (T2) (GGK1095) for the following.
    Method ①:
    While monitoring the RF waveform on the oscilloscope, turn SKEW adjustment screw A just a little bit in a way that the level will reach the maximum.
    While the pick up is at the intermediate periphery, turn SKEW adjustment screw B just a little bit in a way that the level will reach the maximum.
    While the pick up is at the intermediate periphery, turn SKEW adjustment screw A just a little bit in a way that the level will reach the maximum.
    (Make adjustment in the order of A -> B -> A, Please end the each adjustment by turning screw clockwise.)
    Method ②:
    While monitoring the RF level value on the OSD display, turn the SKEW adjustment screw A just a little bit in a way that the level will reach the maximum.
    While the pick up is at the intermediate periphery, turn SKEW adjustment screw B just a little bit in a way that the level will reach the maximum.
    While the pick up is at the intermediate periphery, turn SKEW adjustment screw A just a little bit in a way that the level will reach the maximum.
    (Make adjustment in the order of A -> B -> A, Please end the each adjustment by turning screw clockwise.)
    If the error is not good, please perform Method ① again.

11. Turn the power OFF in the test mode, and after confirming that the disc has stopped, eject the disc.

12. Apply adhesive for fixing the SKEW and lock the screw.
    Refer to the illustration below for the adhesion points.



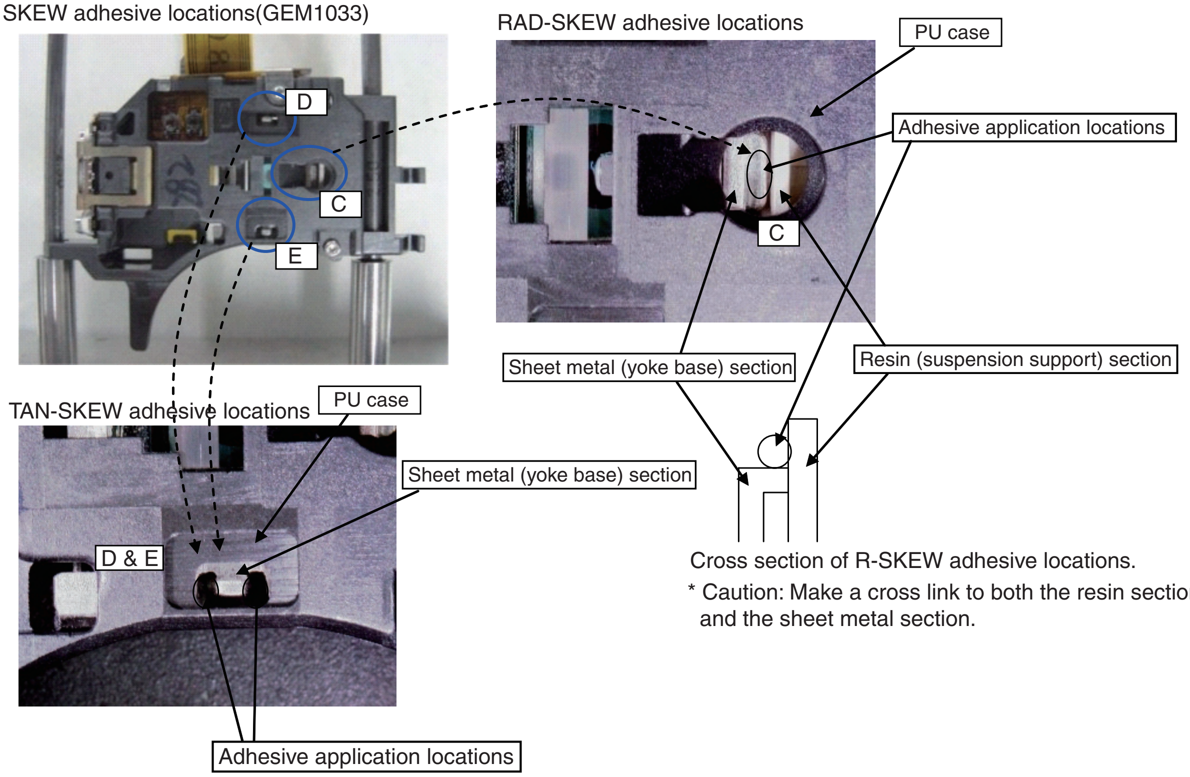
SKEW adjustment locations.



SKEW adhesive locations(GEM1033)

RAD-SKEW adhesive locations

TAN-SKEW adhesive locations

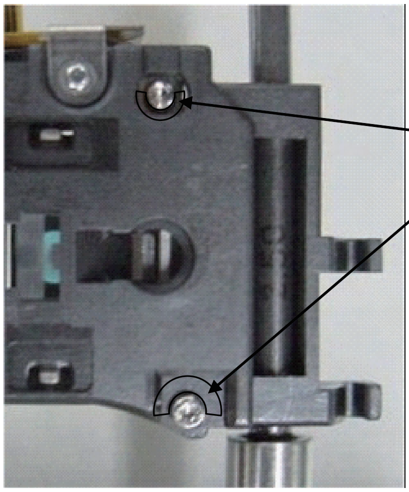

D
C
E
PU case
Adhesive application locations
C
Sheet metal (yoke base) section
Resin (suspension support) section
PU case
Sheet metal (yoke base) section
D & E
Adhesive application locations

Cross section of R-SKEW adhesive locations.

* Caution: Make a cross link to both the resin section and the sheet metal section.

* Caution: Make a cross link to both the case section and the sheet metal section.

Screw locking adhesive location(1401M : produced by THREE BOND)

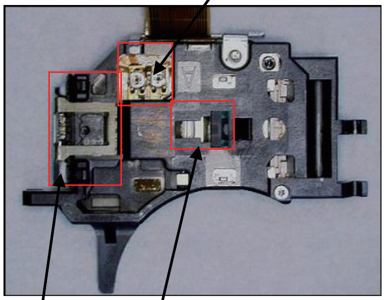


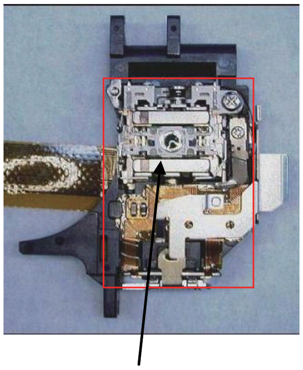
Screw locking adhesive location
Apply the locking agent for more than half of the screw head circumference.
* Caution: The locking agent shall not overflow to outside of the PU case.

Precautions in handling the PU.

* Caution: Do not touch the shaded section in the drawing below.

RF level adjustment section





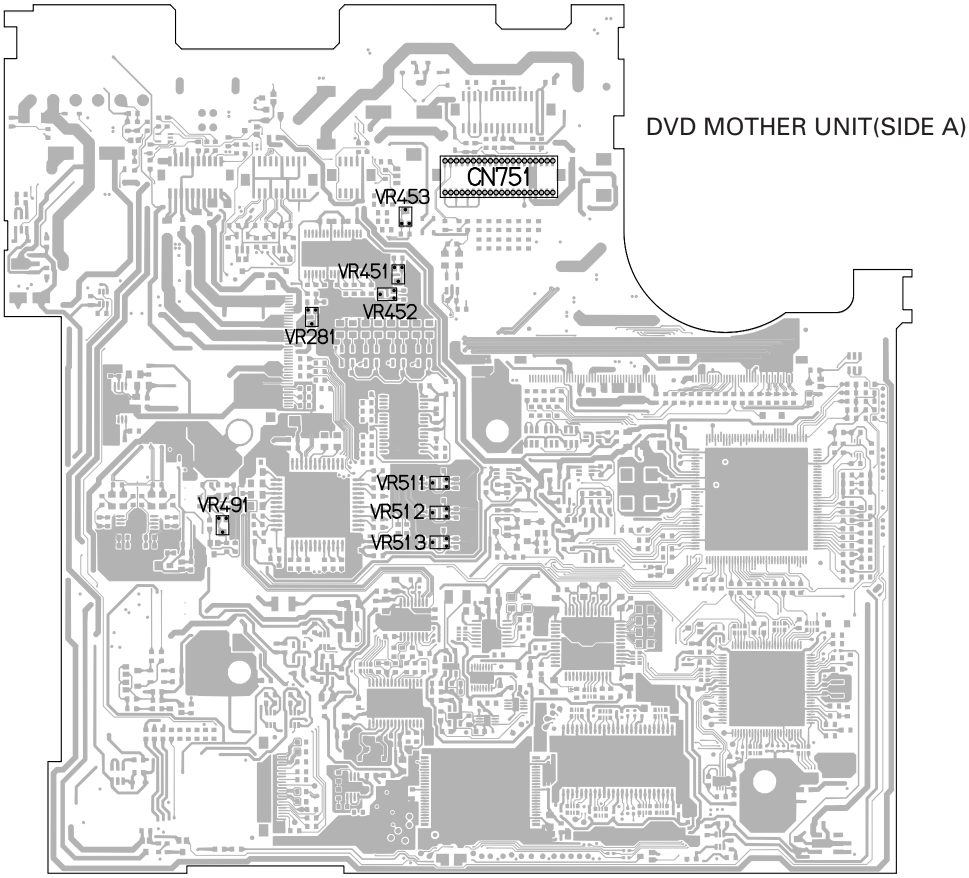
Do not touch the optical parts.

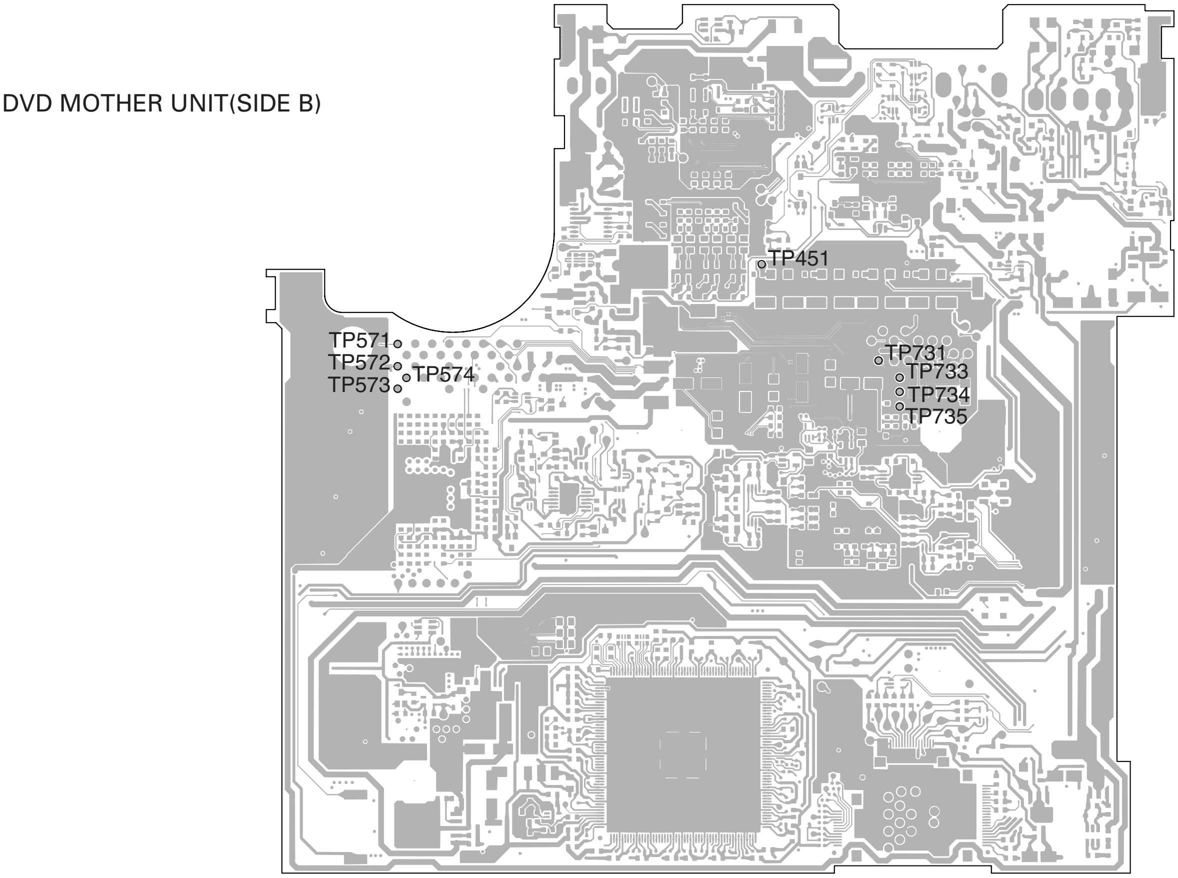
Do not touch the springs.

Hologram (be careful for the static electricity)
GRT adjustment section

8.2 VIDEO LEVEL ADJUSTMENT

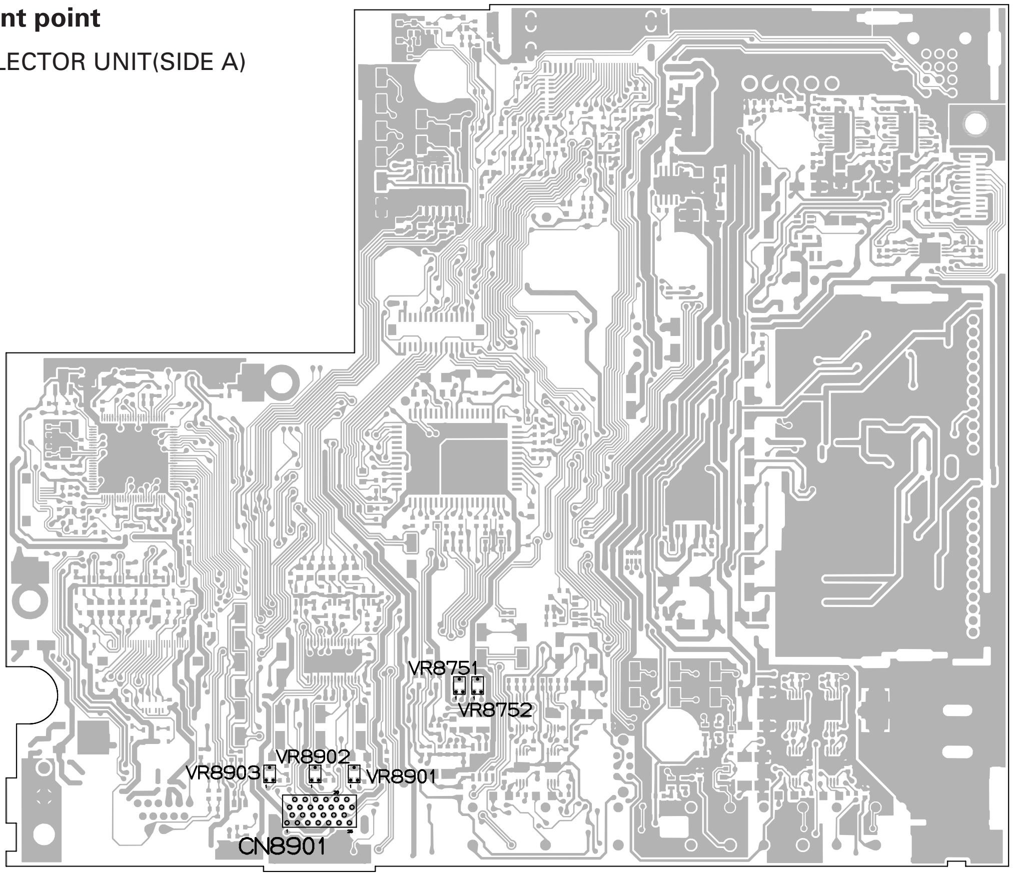
● **Adjustment point**


DVD MOTHER UNIT(SIDE A)
CN751
VR453
VR451
VR452
VR281
VR511
VR512
VR491
VR513

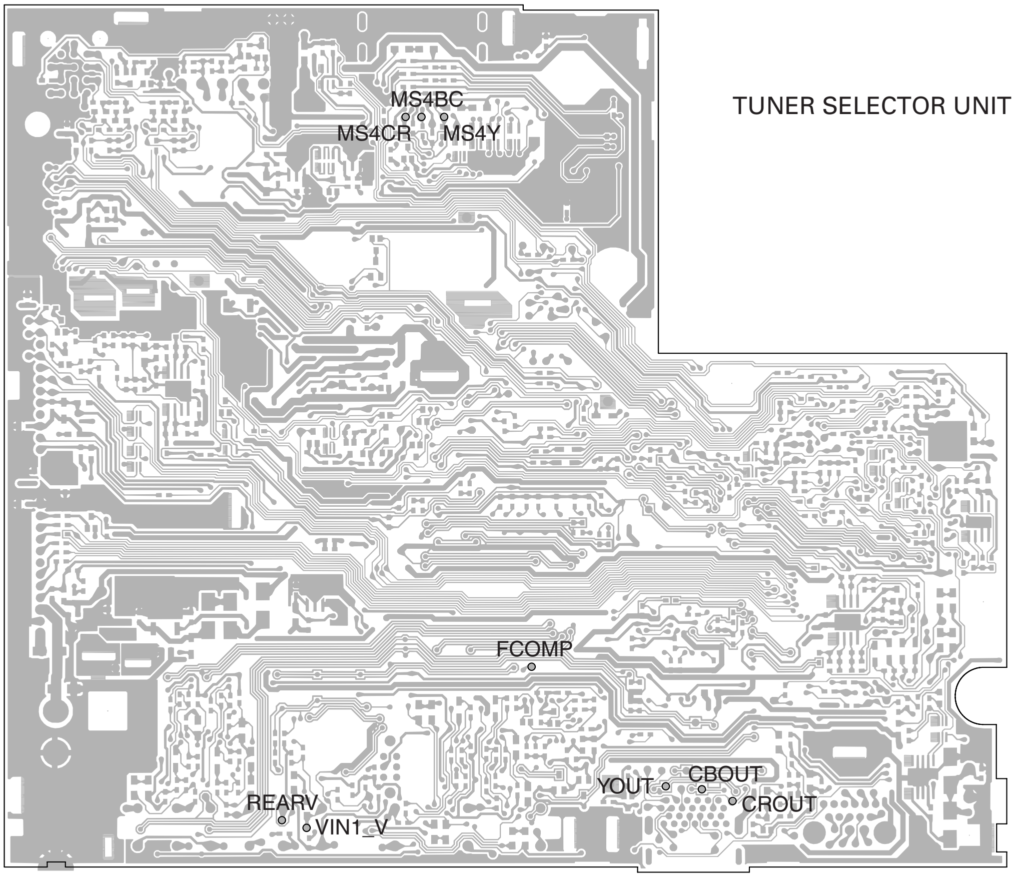

DVD MOTHER UNIT(SIDE B)
TP451
TP571
TP572
TP573
TP574
TP731
TP733
TP734
TP735

● Adjustment point

TUNER SELECTOR UNIT(SIDE A)


VR8751
VR8752
VR8902
VR8903
VR8901
CN8901

TUNER SELECTOR UNIT(SIDE B)


MS4BC
MS4CR
MS4Y
FCOMP
YOUT
CBOUT
CROUT
REARV
VIN1_V

Video level adjustment

	Unit Name	Signal input point	Input signal	Input level	Measuring point	Spec.	Adjusting point
1	Mother unit	TP733	Component Y signal 100% color bar (Fig.1)	1 Vp-p	TP573	1 Vp-p	VR511
2		TP734	Component Pb signal 100% color bar (Fig.2)	700 mVp-p	TP572	700 mVp-p	VR512
3		TP735	Component Pr signal 100% color bar (Fig.3)	700 mVp-p	TP574	700 mVp-p	VR513
4		TP733	Component Y signal 100% color bar	1 Vp-p	CN751 pin16	1 Vp-p (75 Ω Receipt) *1	VR451
5		TP734	Component Pb signal 100% color bar	700 mVp-p	CN751 pin12	700 mVp-p (75 Ω Receipt) *1	VR452
6		TP735	Component Pr signal 100% color bar	700 mVp-p	CN751 pin8	700 mVp-p (75 Ω Receipt) *1	VR453
7		TP731	Composite signal white 100% (100 IRE)	1 Vp-p	TP571	0.75 Vp-p	VR491
8		TP731	Composite signal white 100% (100 IRE)	1 Vp-p	TP451	2 Vp-p	VR281
9	Tuner selector unit	MS4Y	Component Y signal 100% color bar (75 Ω output) *2	1 Vp-p	TP_YOUT (CN8901 pin2)	1 Vp-p (75 Ω Receipt) *1	VR8901
10		MS4BC	Component Pb signal 100% color bar (75 Ω output) *2	700 mVp-p	TP_CBOUT (CN8901 pin4)	700 mVp-p (75 Ω Receipt) *1	VR8902
11		MS4CR	Component Pr signal 100% color bar (75 Ω output) *2	700 mVp-p	TP_CROUT (CN8901 pin6)	700 mVp-p (75 Ω Receipt) *1	VR8903
12		TP_VIN1_V	Composite signal white 100% (100 IRE)	1 Vp-p	FCOMP	2 Vp-p	VR8751
13		TP_VIN1_V	Composite signal white 100% (100 IRE)	1 Vp-p	TP_REARV (CN8251 pin9)	1 Vp-p (75 Ω Receipt) *1	VR8752

*1 : (75 Ω Receipt) which is a spec. In a certain case, please adjust with the value lowered to the standard value side 75 Ω.

*2 : In (75 Ω output) and a certain case, an incoming signal should be set to an input level in the state at the column of an incoming signal.

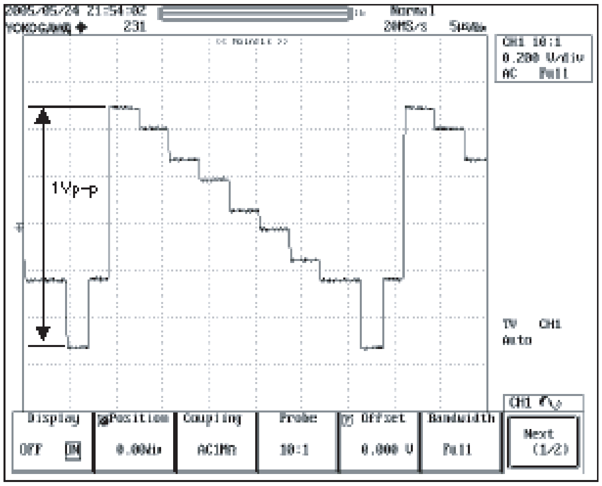


Fig.1 Component Y signal 100% color bar

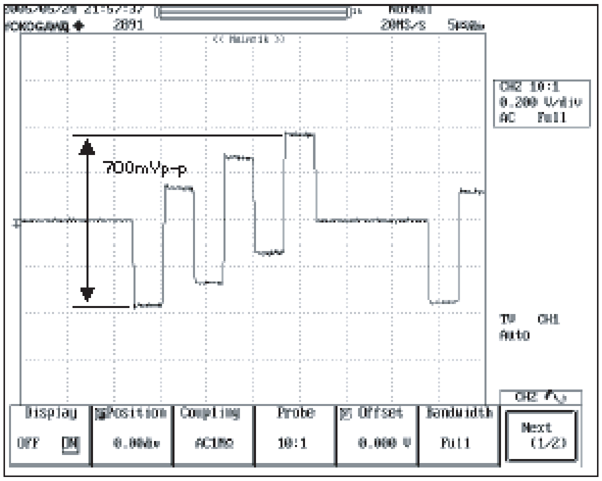


Fig.2 Component Pb signal 100% color bar

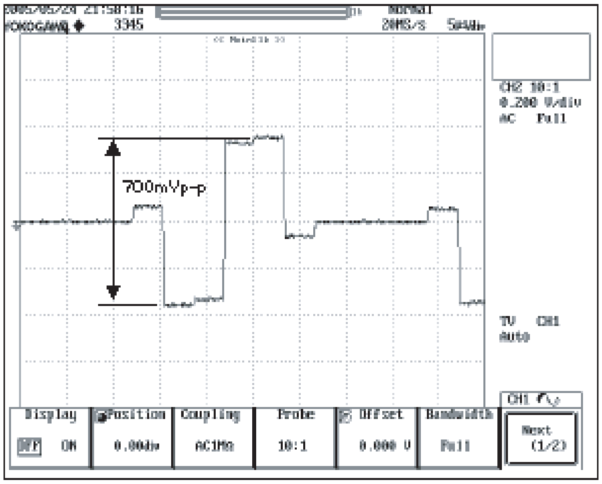
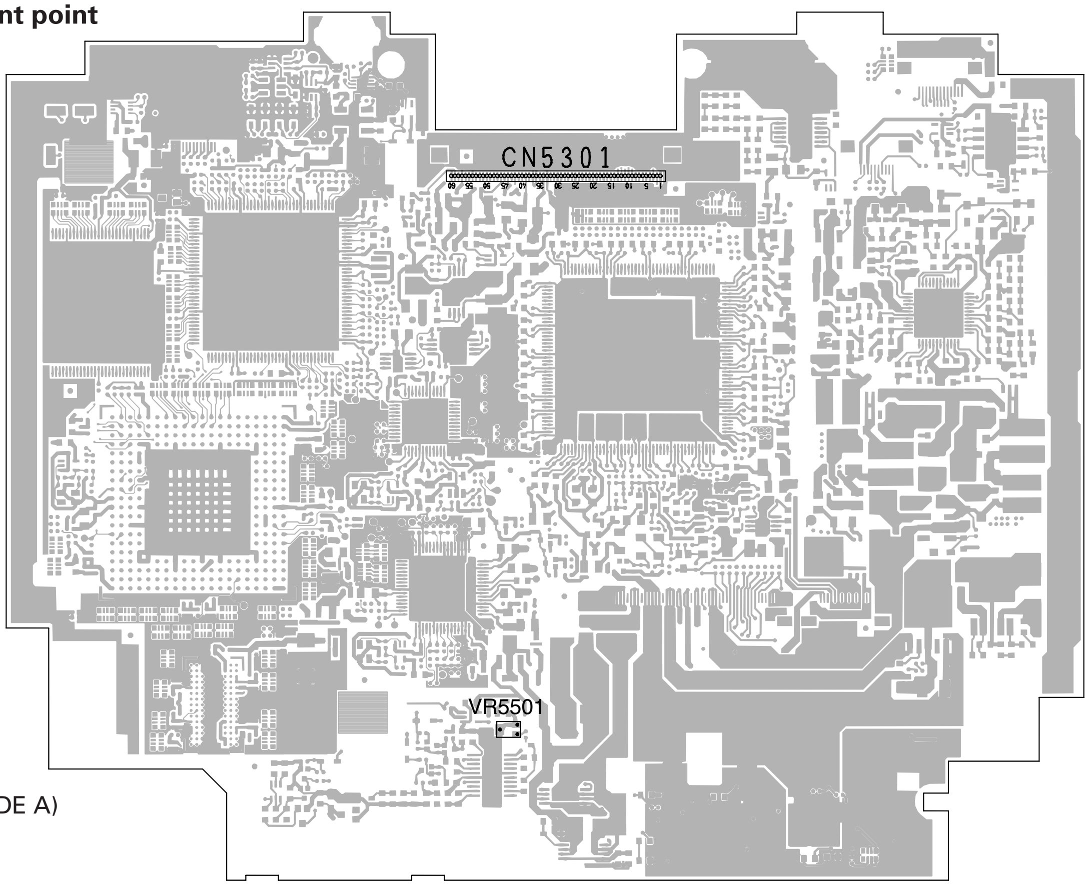


Fig.3 Component Pr signal 100% color bar

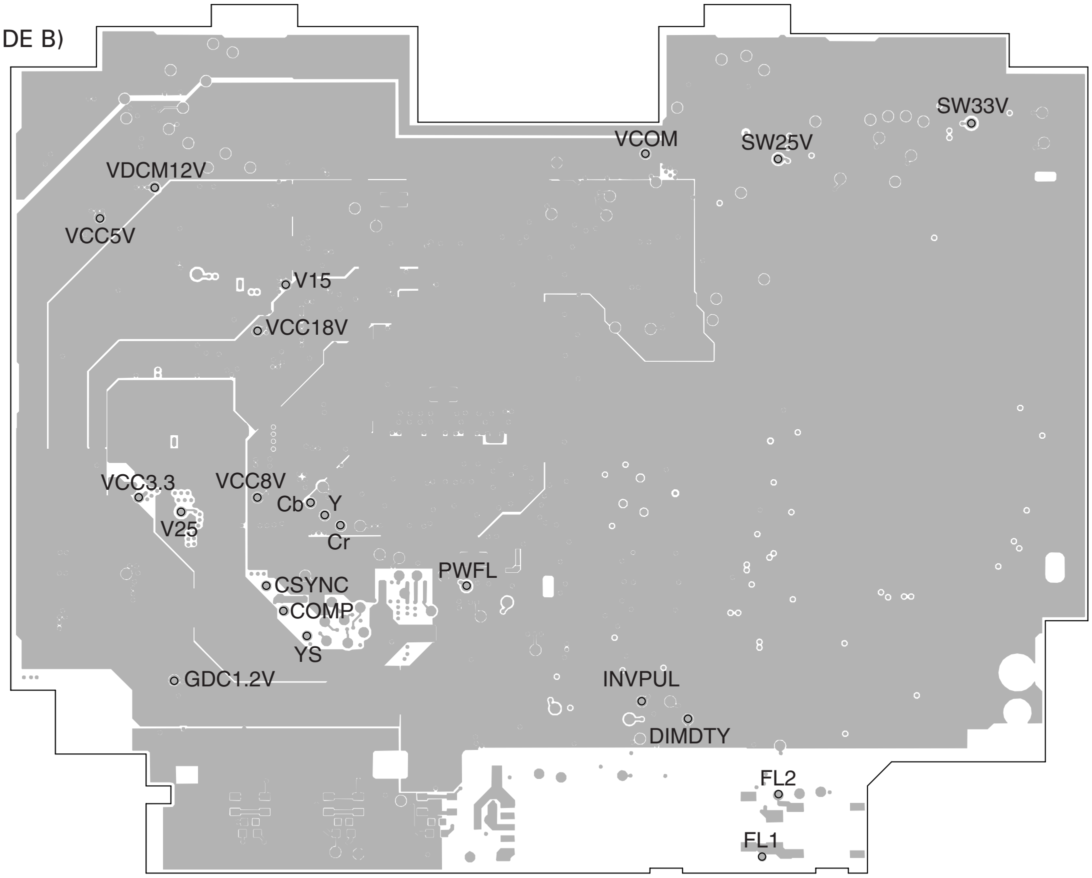
8.3 MONITOR ADJUSTMENT

● Adjustment point


CN5301
VR5501

MONITOR UNIT(SIDE A)

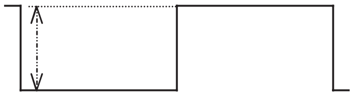
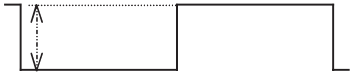
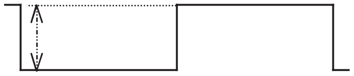
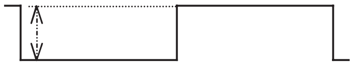
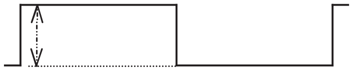
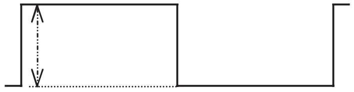
MONITOR UNIT(SIDE B)


SW33V
VCOM
SW25V
VDCM12V
VCC5V
V15
VCC18V
VCC3.3
VCC8V
Cb
Y
V25
Cr
PWFL
CSYNC
COMP
YS
GDC1.2V
INVPUL
DIMDTY
FL2
FL1

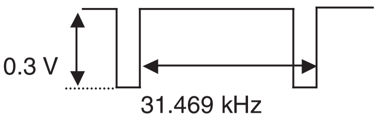
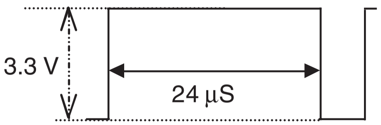
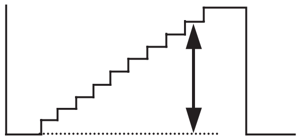
Notes: When the power supply for TC90A96BFG is OFF, be careful not to apply any voltage to its terminals except for IIC lines(SDA and SCL). The IIC lines can accept a maximum of 5 V.

No	Adjustment item	Input signal	Measuring point	Adjusting point	Measuring method and specs.	Remarks
1	3.3 V power supply verification	Apply 14.4 V to TP PW VI.	TP VCC3.3	—	VCC3.3 = 3.3 ± 0.25 V	
2	2.5 V power supply verification	Apply 14.4 V to TP PW VI.	TP V25	—	V25 = 2.5 ± 0.15 V	
3	1.5 V power supply verification	Apply 14.4 V to TP PW VI.	TP V15	—	V15 = 1.5 ± 0.08 V	
4	5 V power supply verification	Apply 14.4 V to TP PW VI.	TP VCC5V	—	VCC5V = 4.9 ± 0.3 V	
5	8 V power supply verification	Apply 14.4 V to TP PW VI.	TP VCC8V	—	VCC8V = 8.0 ± 0.5 V	
6	18.5 V power supply verification	Apply 14.4 V to TP PW VI.	TP VCC18V	—	VCC18V = 18.5 ± 0.5 V	
7	-12 V power supply verification	Apply 14.4 V to TP PW VI.	TP VM12V	—	VM12V = -12.0 ± 0.6 V	
8	3.3 V power supply verification	Apply 4 V to TP SW4V.	TP SW33V	—	SW33V = 3.3 ± 0.2 V	
9	2.5 V power supply verification	Apply 4 V to TP SW4V.	TP SW25V	—	SW25V = 2.5 ± 0.15 V	
10	1.2 V power supply verification	Apply 1.8 V to TP DD18V.	TP GDC1.2V	—	GDC1.2V = 1.2 ± 0.08 V	

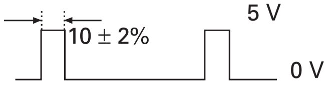
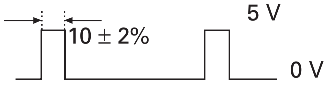
Notes: When the power supply for TC90A96BFG is OFF, be careful not to apply any voltage to its terminals except for IIC lines(SDA and SCL). The IIC lines can accept a maximum of 5 V.

No	Adjustment item	Input signal	Measuring point	Adjusting point	Measuring method and spec.	Remarks
11	Vcom amp output waveform adjustment	Any input signal	CN5301 pin60 (TP VCOM)	COM_AC data of EEP-ROM	4.35 ± 0.10 V 	It connects with the LCD panel and measures.
12	The step voltage waveform verification V1	Any input signal	CN5301 pin12		4.10 ± 0.30 V 	It connects with the LCD panel and measures.
13	The step voltage waveform verification V3	Any input signal	CN5301 pin10		2.10 ± 0.10 V 	It connects with the LCD panel and measures.
14	The step voltage waveform verification V5	Any input signal	CN5301 pin8		0.85 ± 0.10 V 	It connects with the LCD panel and measures.
15	The step voltage waveform verification V7	Any input signal	CN5301 pin6		0.25 ± 0.10 V 	It connects with the LCD panel and measures.
16	The step voltage waveform verification V9	Any input signal	CN5301 pin4		2.70 ± 0.20 V 	It connects with the LCD panel and measures.

Notes: When the power supply for TC90A96BFG is OFF, be careful not to apply any voltage to its terminals except for IIC lines(SDA and SCL). The IIC lines can accept a maximum of 5 V.

No	Adjustment item	Input signal	Measuring point	Adjustment point	Measuring method and specs.	Remarks
17	Preparation for video image confirmation	Apply a synchronized signal to TP CSYNC				0.3 V(75 Ω) input
18	RGB digital output verification	Apply a white 100% signal to TP Y,Cr,Cb (0.70 Vpp ± 1%)	CN5301 pin14～31		Confirm that each output is "H" (3.3 V) while image is displayed. 	When OSD is displayed in EEP-ROM adjustment mode, in which "L" output is mixed the area with letters, ignore it.
19	Composite level adjustment	Apply a composite video 10 steps signal to TP COMP (1.0 Vpp ± 1%)	DAC jig output	Register setting of SA13h D5～0	Amplitude of 9th gradation and 0th gradation shall be 1.77 V ± 0.03 V. 	
20	Video image verification	Apply a composite video lamp signal (monochrome) input to TP COMP	Screen	—	Check if the gradation changes smoothly and there is no colored part on the whole screen.	This is done to check if the couble window IC digital out is not "BRIDGE" or OPEN.
21	Aging	Any input signal	—	—	Leaving it in operation for over 30 minutes.	
22	Flicker verification	It test-pattern-outputs from GDC.	Screen	COM DC data of EEP-ROM	Use the right and left buttons to change value to the level where flicker on the screen is minimized.	

In the following table, SA**h is a sub-address of TC90A96BFG.

No	Adjustment item	Input	Measuring point	Adjusting point	Measuring method and specs.	Remarks
23	BACK LIGHT DRIVE FREQUENCY	Apply 14.4 V ± 0.2 V to TP PWFL TP GNDFL : GND TP INVPUL : LOW TP DIMDTY : LOW	TP : FL1 TP : FL2	VR 5501	48.0 ± 0.1 kHz	100k ohms is connected between TP FL1 and TP FL2. It acts as the monitor of the waveform after potential. Don't acts as the monitor of the TP FL1 directly. (there is a possibility that a measuring instrument may be destroyed, for high voltage.)
24	FREQUENCY CHANGE CHECK	Apply wave of 98.0 ± 1 kHz to TP INVPUL 	TP : FL1 TP : FL2		49.0 ± 0.5 kHz	It checks that the waveform after potential is set to 49 kHz
25	FREQUENCY CHANGE CHECK	Apply wave of 104.0 ± 1 kHz to TP INVPUL 	TP : FL1 TP : FL2		52.0 ± 0.5 kHz	It checks that the waveform after potential is set to 52 kHz

[Outline]

It is a mode used to adjust each preset value stored in the EEPROM for storing the preset values.
The adjusted values are stored in the EEPROM for storing the preset values.

[Method for Mode IN]

The method for Mode IN varies depending on the operational environment.

- When operated as a unit
  Reset the monitor micro computer while the [STEST1] terminal is set to Low and the [MONADJ] terminal is set to Low.
- When operated as a product
  Reset the monitor micro computer while the [STEST1] terminal is set to High and the [MONADJ] terminal is set to Low.
  Or, turn the power ON while pressing TI key and ATT key.

[Basic explanation on each menu]

- In the "setting content", adjustment range, initial value, and displayed character string of the items preset in each menu are described.

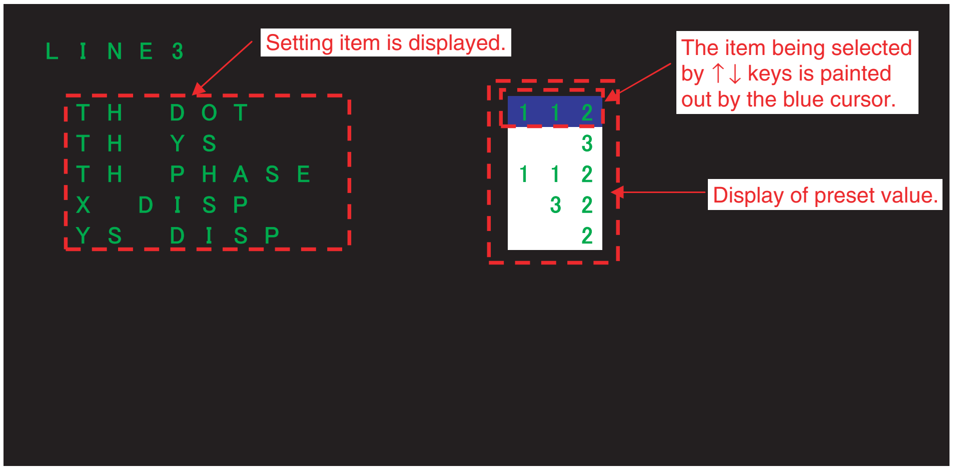
[Example) Setting content]

Setting item		Adjustment range	Initial value
Content	Displayed character string		
Dot search threshold	TH DOT	0-255	112
YS search threshold	TH YS	0-4	3
Phase search threshold	TH PHASE	0-255	112
X disp	X DISP	0-63	32
YS disp	YS DISP	0-4	2

Character string displayed on the screen.

- In the "display specifications", the screen actually displayed under each menu is explained.
  Display example is shown below for explanation.

  [Example) Display specifications]



Setting item is displayed.

The item being selected by ↑↓ keys is painted out by the blue cursor.

Display of preset value.

- Cursor color
  When accessing normally to EEPROM:
  The cursor color will change blue → red → blue.
  When accessing abnormally to EEPROM(error):
  The cursor color will stay red (blue → red → red) even if the key is released.
  Note) When a value is changed continuously, the cursor color may change blue → red → red → ... → blue.
  But it is not an error.
  (The red color continues for the convenience of the display cycle.)

[Flicker adjustment menu]

[Setting content]

Setting item		Adjustment range	Initial value
Content	Displayed character string		
Common inverted output center value	COM DC	0-255	60

[Line adjustment 1 menu]

[Setting content]

Setting item		Adjustment range	Initial value
Content	Displayed character string		
Bright	BRIGHT	0-255	138
RGB simultaneous contrast(SA0C[D7-0])	CONTRAST	0-255	168
Common inverted output amplitude adjusted value	COM AMP AJ	0-255	138
R output DC offset(SA1A[D11-8])	ROUT BIAS	0-15	8
G output DC offset(SA1C[D11-8])	GOUT BIAS	0-15	8
B output DC offset(SA1E[D11-8])	BOUT BIAS	0-15	8
Main Y contrast(SA0F[D5-0])	RGB CNTRST	0-63	34
Sub Y contrast(SA13[D5-0])	CMP CNTRST	0-63	26
Dither bit(SA0D[D15])	DITHER BIT	0-1	1(ON)

■ The bright value is determined by the image quality setting table based on the user setting step and the common inverted output amplitude adjusted value (COM AMPAJ).
This bright value controls the output of [DACDI] of the monitor micro computer terminal.

Supplement 1) When the bright value is changed in the test mode, however, it will not be reflected in the user setting step value.

Supplement 2) In the test mode during monitor unit operation, the user setting step will not be reflected in the bright value calculation.

Note 1... The "black density (=bright)" adjustment by the user is accomplished only by controlling the common inverted output amplitude, and the brightness of the double window IC is not used.

Note 2... The content of bright and of RGB simultaneous contrast are reference values (adjustable though) only when adjusting other items, and are not stored in the EEPROM.

Note 3... Be careful as the content of R(G/B) output DC offset, main Y contrast and sub Y contrast are different between the displayed values (EEPROM written values) and the register setting values in the double window IC.
(Because the relationship between the double window IC register value and the screen output value is not linear, there is a need for conversion by software.)

The cases where the displayed value (EEPROM written values) and the register setting values in the double window IC are different are summarized below.

[R(G/B) output DC offset]

Displayed value (=adjusted value) (DEC)	EEPROM written value (DEC)	Double window IC register value (BIN)	
15	15	0111	(MAX)
14	14	0110	
:	:	:	
9	9	0001	
8	8	0000	(TYP)
7	7	11111	
:	:	:	
1	1	1001	
0	0	1000	(MIN)

[Main Y contrast, sub Y contrast]

Displayed value (=adjusted value) (DEC)	E2PROM written value (DEC)	Double window IC register value (BIN)	
63	63	011111	(MAX)
62	62	011110	
:	:	:	
33	33	000001	
32	32	000000	(TYP)
31	31	111111	
:	:	:	
1	1	100001	
0	0	100000	(MIN)

[Line adjustment 2 menu]

[Setting content]

Setting item		Adjustment range	Initial value
Content	Displayed character string		
RGB & YS horizontal positioning(SA2B[D15-8])	DOT H POSIT	0-255	24
YS sampling phase 1(SA2D[D15-12])	YS SAMPL	0-15	8
AD sampling phase B(SA2D[D11-8])	B SAMPL	0-15	8
AD sampling phase G(SA2D[D7-4])	G SAMPL	0-15	8
AD sampling phase R(SA2D[D3-0])	R SAMPL	0-15	8
YS internal delay adjustment(SA2F[D3-0])	YS DELAY	0-15	8

Note 1... Be careful as the displayed value (EEPROM written value) and the register setting values in the double window IC are different for the following items.
(Because the relationship between the double window IC register value and the screen output value is not linear, there is a need for conversion by software.)

- **YS sampling phase 1**
- **AD sampling phase B**
- **AD sampling phase G**
- **AD sampling phase R**
- **YS internal delay adjustment**

The cases where the displayed value (EEPROM written values) and the register setting values in the double window IC are different are summarized below.

[YS sampling phase 1, AD sampling phase B/G/R, YS internal delay adjustment]

Displayed value (=adjusted value) (DEC)	E2PROM written value (DEC)	Double window IC register value (BIN)	
15	15	0111	(MAX)
14	14	0110	
:	:	:	
9	9	0001	
8	8	0000	(TYP)
7	7	1111	
:	:	:	
1	1	1001	
0	0	1000	(MIN)

[Line adjustment 3 menu]

[Setting content]

Setting item		Adjustment range	Initial value
Content	Displayed character string		
Dot search threshold	TH DOT	0-255	87
YS search threshold	TH YS	0-4	3
Phase search threshold	TH PHASE	0-255	112
X disp	X DISP	0-63	1
YS disp	YS DISP	0-4	2

[Line adjustment 4 menu]

[Setting content]

Setting item		Adjustment range	Initial value
Content	Displayed character string		
Main horizontal enhancer gain(SA10[D13-12])	M H GAIN	0-3	1
Main horizontal enhancer limiter(SA10[D11-10])	M H LIMIT	0-3	3
Main horizontal enhancer f0(SA10[D8])	M H F0	0-1	1
Main vertical enhancer gain(SA10[D7-6])	M V GAIN	0-3	2
Main vertical enhancer return(SA10[D5-4])	M V ORI	0-3	2
Main vertical enhancer corering(SA10[D3-2])	M V CORE	0-3	2

[Line adjustment 5 menu]

[Setting content]

Setting item		Adjustment range	Initial value
Content	Displayed character string		
Sub horizontal enhancer gain(SA10[D13-12])	S H GAIN	0-3	2
Sub horizontal enhancer limiter(SA10[D11-10])	S H LIMIT	0-3	1
Sub horizontal enhancer f0(SA10[D8])	S H F0	0-1	0
Sub vertical enhancer gain(SA10[D7-6])	S V GAIN	0-3	2
Sub vertical enhancer return(SA10[D5-4])	S V ORI	0-3	1
Sub vertical enhancer corering(SA10[D3-2])	S V CORE	0-3	2

[Line adjustment 6 menu]

[Setting content]

Setting item		Adjustment range	Initial value
Content	Displayed character string		
Brightness R(SA0C[D13-8])	BRIGHT R	0-63	16
Brightness G(SA0D[D13-8])	BRIGHT G	0-63	16
Brightness B(SA0E[D13-8])	BRIGHT B	0-63	16
γ correction ON/OFF(SA1A[D15])	GAMMA		OFF
RGB simultaneous γ 1 inflection point(SA1A[D5-0])	GAMMA 1	0-63	0
RGB simultaneous γ 2 inflection point(SA1B[D12-8])	GAMMA 2	0-31	4
RGB simultaneous γ 3 inflection point(SA1B[D4-0])	GAMMA 3	0-31	1
RGB simultaneous γ inclination A(SA1A[D14-12])	GAMMASLP A	0-7	4
RGB simultaneous γ inclination B(SA1B[D15-13])	GAMMASLP B	0-7	1
RGB simultaneous γ inclination C(SA1B[D7-5])	GAMMASLP C	0-7	1

Note 1... Be careful as the displayed value (EEPROM written value) and the register setting values in the double window IC are different for the following items.
(Because the relationship between the double window IC register value and the screen output value is not linear, there is a need for conversion by software.)

- **Brightness R**
- **Brightness G**
- **Brightness B**

The cases where the displayed value (EEPROM written values) and the register setting values in the double window IC are different are summarized below.

[Brightness R/G/B]

Displayed value (=adjusted value) (DEC)	E2PROM written value (DEC)	Double window IC register value (BIN)	
63	63	011111	(MAX)
62	62	011110	
:	:	:	
33	33	000001	
32	32	000000	(TYP)
31	31	111111	
:	:	:	
1	1	100001	
0	0	100000	(MIN)

[Line adjustment 7 menu]

[Setting content]

Setting item		Adjustment range	Initial value
Content	Displayed character string		
Main PLL0(SA24[D15-8])	MAIN PLL0	0-255	218
Main PLL1(SA24[D7-0])	MAIN PLL1	0-255	110
Main PLL2(SA25[D15-8])	MAIN PLL2	0-255	33
Main PLL3(SA25[D7-0])	MAIN PLL3	0-255	46

[Line adjustment 8 menu]

[Setting content]

Setting item		Adjustment range	Initial value
Content	Displayed character string		
During TV, sub PLL0(SA26[D15-8])	SUB PLL0 TV	0-255	140
During TV, sub PLL1(SA26[D7-0])	SUB PLL1 TV	0-255	136
Other, sub PLL0(SA27[D15-8])	SUB PLL0	0-255	140
Other, sub PLL1(SA27[D7-0])	SUB PLL1	0-255	140
During TV, sub PLL2(SA28[D15-8])	SUB PLL2 TV	0-255	100
During TV, sub PLL3(SA28[D7-0])	SUB PLL3 TV	0-255	68
Other, sub PLL2(SA29[D15-8])	SUB PLL2	0-255	152
Other, sub PLL3(SA29[D7-0])	SUB PLL3	0-255	107

[Line adjustment 9 menu]

[Setting content]

Setting item		Adjustment range	Initial value
Content	Displayed character string		
SA46[D15-8]	SA46H UPPER	0-255	2
SA46[D7-0]	SA46H LOWER	0-255	0
SA47[D15-8]	SA47H UPPER	0-255	2
SA47[D7-0]	SA47H LOWER	0-255	0
SA48[D15-8]	SA48H UPPER	0-255	0
SA48[D7-0]	SA48H LOWER	0-255	0
SA49[D15-8]	SA49H UPPER	0-255	0
SA49[D7-0]	SA49H LOWER	0-255	0
SA4A[D15-8]	SA4AH UPPER	0-255	0
SA4A[D7-0]	SA4AH LOWER	0-255	0

[Line adjustment 10 menu]

[Setting content]

Setting item		Adjustment range	Initial value
Content	Displayed character string		
SA4B[D15-8]	SA4BH UPPER	0-255	0
SA4B[D7-0]	SA4BH LOWER	0-255	0
SA4C[D15-8]	SA4CH UPPER	0-255	0
SA4C[D7-0]	SA4CH LOWER	0-255	0
SA4D[D15-8]	SA4DH UPPER	0-255	0
SA4D[D7-0]	SA4DH LOWER	0-255	0
SA4E[D15-8]	SA4EH UPPER	0-255	0
SA4E[D7-0]	SA4EH LOWER	0-255	0
SA4F[D15-8]	SA4FH UPPER	0-255	0
SA4F[D7-0]	SA4FH LOWER	0-255	0

[Line adjustment 11 menu]

[Setting content]

Setting item		Adjustment range	Initial value
Content	Displayed character string		
During DVD, main PLL3(SA25[D7-0])	MAIN_H_PLL3_DVD	0-255	69
During DVD, main PLL3 gain down(SA46[D11])	MAIN_PLL3_GAIN_DVD	0-1	1
During DVD, main SYNC IN sampling(SA47[D9-8])	MAIN_SYNC_IN_DVD	0-3	2
During DTV, main PLL3(SA25[D7-0])	MAIN_H_PLL3_DTV	0-255	85
During DTV, main PLL3 gain down(SA46[D11])	MAIN_PLL3_GAIN_DTV	0-1	1
During DTV, main SYNC IN sampling(SA47[D9-8])	MAIN_SYNC_IN_DTV	0-3	2
During D.RGB, main PLL3(SA25[D7-0])	MAIN_H_PLL3_DRGB	0-255	46
During D.RGB, main PLL3 gain down(SA46[D11])	MAIN_PLL3_GAIN_DRGB	0-1	0
During D.RGB, main SYNC IN sampling(SA47[D9-8])	MAIN_SYNC_IN_DRGB	0-3	2

[Line adjustment 12 menu]

[Setting content]

Setting item		Adjustment range	Initial value
Content	Displayed character string		
During NAVI RGB, main PLL3(SA25[D7-0])	MAIN_H_PLL3_NRGB	0-255	70
During NAVI RGB, main PLL3 gain down(SA46[D11])	MAIN_PLL3_GAIN_NRGB	0-1	1
During NAVI RGB, main SYNC IN sampling(SA47[D9-8])	MAIN_SYNC_IN_NRGB	0-3	3
During NAVI DVD, main PLL3(SA25[D7-0])	MAIN_H_PLL3_NDVD	0-255	69
During NAVI DVD, main PLL3 gain down(SA46[D11])	MAIN_PLL3_GAIN_NDVD	0-1	1
During NAVI DVD, main SYNC IN sampling(SA47[D9-8])	MAIN_SYNC_IN_NDVD	0-3	2
During VDP, main PLL3(SA25[D7-0])	MAIN_H_PLL3_VDP	0-255	38
During VDP, main PLL3 gain down(SA46[D11])	MAIN_PLL3_GAIN_VDP	0-1	1
During VDP, main SYNC IN sampling(SA47[D9-8])	MAIN_SYNC_IN_VDP	0-3	2

[Dimmer parameter setting menu]

[Setting content]

Setting item		Adjustment range	Initial value
Content	Displayed character string		
Backlight output max value	BL MAX	0x00-0xFF	C4
Backlight output min value	BL MIN	0x00-0xFE	59
Dimmer threshold value (high)	REF H	0x01-0xFE	C0
Dimmer threshold value (low)	REF L	0x00-0xFD	60
External light point (high)	LUM H	0x02-0xFF	E2
External light point (medium)	LUM M	0x01-0xFE	87
External light point (low)	LUM L	0x00-0xFD	52
Backlight point (high)	BL H	0x00-0xFF	C4
Backlight point (medium)	BL M	0x00-0xFF	C4
Backlight point (low)	BL L	0x00-0xFF	68

■ The data of the points (coordinates) for the dimmer is stored in the EEPROM but not used for CS calculation as it is changed by the user operation.

Note 1... The adjustment range of each item listed above is the range applicable when the following relationships are satisfied.

The value which destroys the relationship below cannot be set even if it is within the adjustment range.

- **Regarding the backlight output minimum value, there is a relationship where; "backlight output minimum value < backlight output maximum value" and "backlight output minimum value ≦ backlight point (low)"**
- **"External light point (low) ≦ dimmer threshold value (low) < external light point (medium) ≦ ≦ dimmer threshold value (high) < external light point (high)"**
- **"Backlight point (low) ≦ backlight point (medium) ≦ backlight point (high) ≦ ≦ backlight output maximum value"**

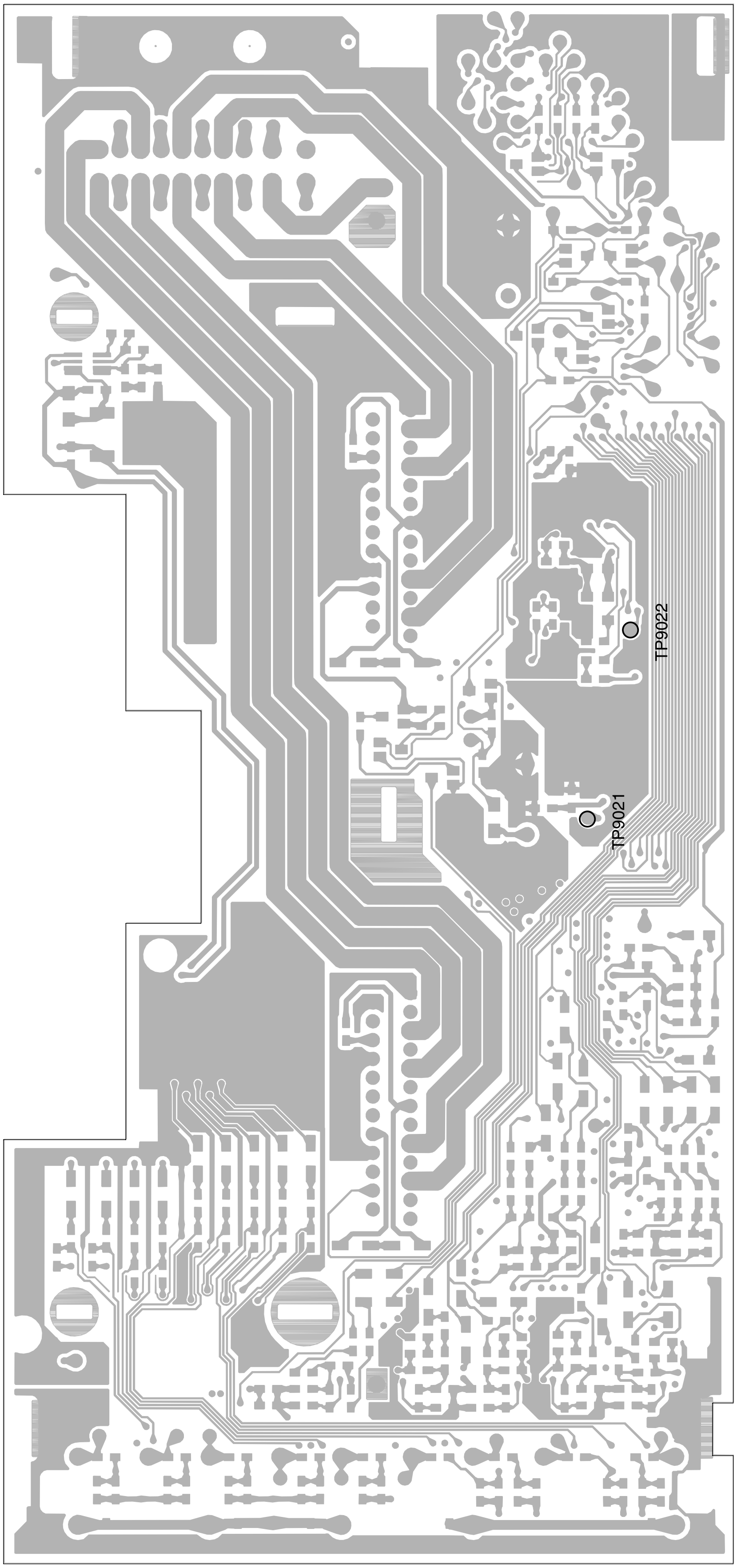
[Operational specifications]

Operational description	Main unit key	Remote controller key
To top menu	A.MENU/ENTER	MENU_ENTER
Selection cursor upward movement	↑	↑
Selection cursor downward movement	↓	↓
Item content adjustment	←	←
Item content adjustment	→	→

8.4 DC-DC CONVERTER ADJUSTMENT

● **Adjustment point**

AMP UNIT(SIDE B)


TP9022
TP9021

DC-DC converter adjustment

Test condition

1. DC-DC converter output : -9 V(-8.9 V) Load resistance : 220 Ω (1 W or more)
2. DDCCTL : Low(0 V) , SYSPW : HIGH(5 V)

DC-DC converter input power supply voltage : 14.4 V ± 0.2 V

Measuring point

1. Output voltage output , output noise level

DC-DC converter output : Test point(TP9021) and GND

2. Frequency

Frequency : Test point(TP9022) and GND

No.	ITEMS	SPECIFICATIONS	NOTE	APPLICATION
1	Output voltage	-8.9 ± 0.4 V	80 mA Frequency	
2	Frequency	370 ± 5 kHz	DDCCTL : LOW Frequency	
3	Frequency	425 ± 10 kHz	DDCCTL : HIGH No filter	
4	Output noise level	-30 dBs or less		

8.5 TOUCH PANEL ADJUSTMENT

[How to activate]

■ Turn the power on while pressing PGM and OPEN/CLOSE, the system will proceed to the calibration test mode.

[Menu types in the mode]

■ The calibration test mode consists of the following menus.

Top menu

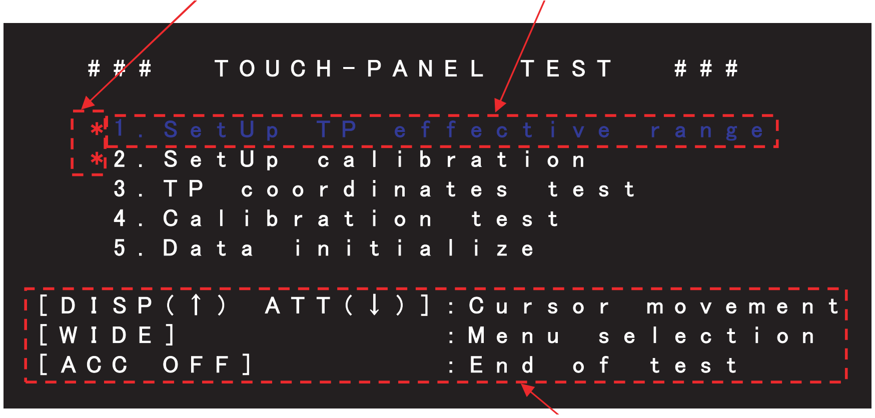
- **Outermost circumference inspection**
- **16 points adjustment**
- **Coordinate inspection**
- **Calibration verification**
- **Data initialization**

[Description of the top menu]

[Display specifications]

Adjustment completion indicator mark

Item being selected is indicated in blue



```
  # # #    T O U C H - P A N E L   T E S T    # # #

*1 . S e t U p   T P   e f f e c t i v e   r a n g e
*2 . S e t U p   c a l i b r a t i o n
 3 . T P   c o o r d i n a t e s   t e s t
 4 . C a l i b r a t i o n   t e s t
 5 . D a t a   i n i t i a l i z e

[ D I S P ( ↑ )   A T T ( ↓ ) ] : C u r s o r   m o v e m e n t
[ W I D E ]                      : M e n u   s e l e c t i o n
[ A C C   O F F ]                : E n d   o f   t e s t
```

Operational specifications are displayed.
※ Operation procedure by the main unit keys only is displayed due to the limitation of the display space. When operating by the remote controller, refer to these specifications.

■ Conditions for the adjustment completion mark (*) to be lighted up.
(The mark will be lighted up if one of the multiple conditions is met.)

☐ Outermost circumference inspection
- When the outermost circumference inspection of the calibration for line has been completed normally.

☐ 16 points adjustment
- When the calibration inspection for line has been completed normally.

■ Conditions for the adjustment completion mark (*) to go out.
(The mark will go out if one of the multiple conditions is met.)

☐ Outermost circumference inspection
- When the above mentioned lighting conditions are not applicable.
- When the adjusted value has been initialized (Data initialize).
- When the EEPROM has been initialized.

☐ 16 points adjustment
- When the above mentioned lighting conditions are not applicable.
- When the adjusted value has been initialized (Data initialize).
- When the EEPROM has been initialized.

[Key operation specification]

Operational description	Main unit key	Remote controller key
Menu enter	WIDE	MENU_ENTER
Selected cursor up movement	BAND	↑
Selected cursor down movement	ATT	↓

■ Select a menu desired to be adjusted by using the key allocated for "selected cursor up/down movement", and enter the selected menu by using the key allocated for "menu enter".
※ There is no condition for the menu entering.

[Outermost circumference inspection]

[Outline]

- The outermost circumference of the touch panel is traced, and the outermost circumference value for X and Y and the reference value for A/D correction are obtained.
  When exiting the menu by pressing WIDE key, the obtained value and the adjustment information (OK/NG) are saved in the EEPROM.
  When saving the data, checking is made whether the obtained value is within the range of the **"table of allowable range for setting value"** as shown below or not.
  - When the obtained value is within the range;
    The obtained value shown below and the adjustment information are written into the EEPROM, and OK is displayed on the screen.

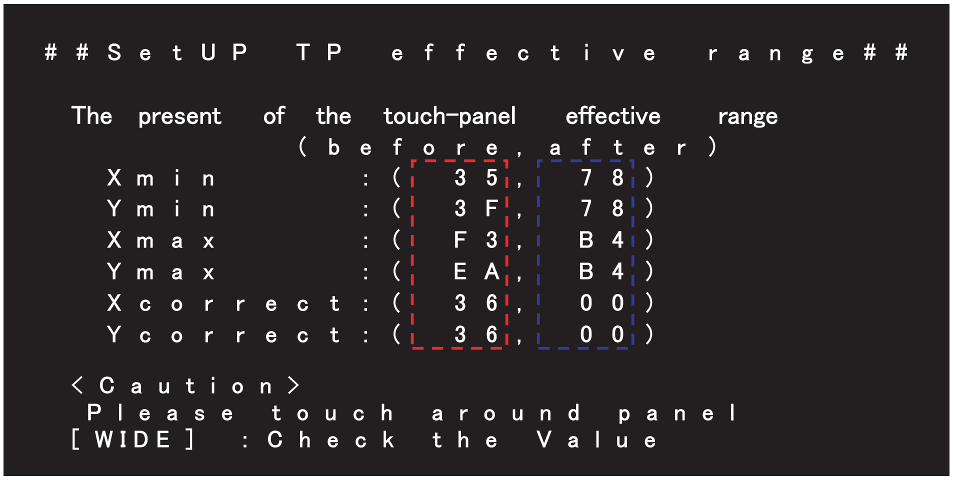
Outermost circumference value for X and Y (min/max)	: 4 bytes
Reference value for A/D correction of X and Y	: 2 bytes
Adjustment information (adjustment OK)	: 1 byte
	: Total 7 bytes

  - When the obtained value is outside of the range;
    The adjustment information described below will be written into the EEPROM, and NG is displayed on the screen.

Adjustment information (adjustment NG)	: 1 byte

[Display specifications]

■ Outermost circumference inspection in process



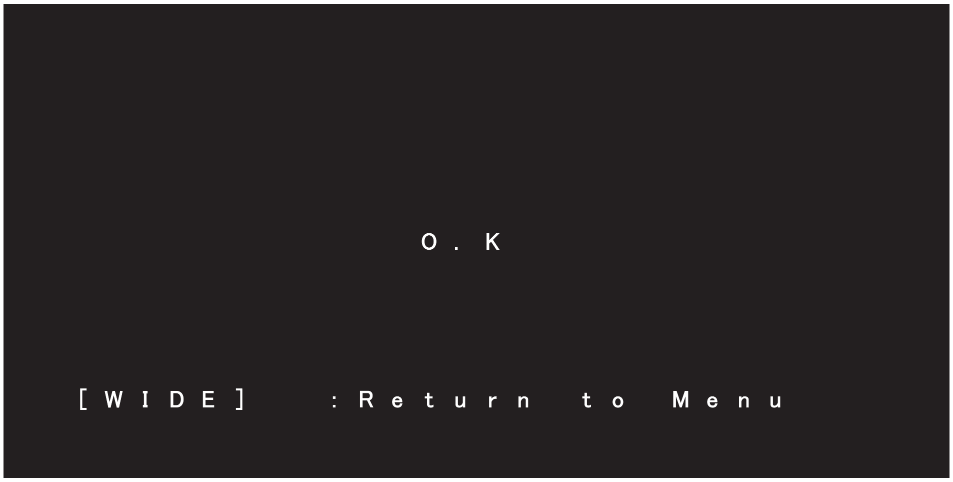
```
##SetUP TP effective range##

  The present of the touch-panel effective range
                  (before, after)
    Xmin        : (  35,   78)
    Ymin        : (  3F,   78)
    Xmax        : (  F3,   B4)
    Ymax        : (  EA,   B4)
    Xcorrect    : (  36,   00)
    Ycorrect    : (  36,   00)

  <Caution>
   Please touch around panel
  [WIDE] : Check the Value
```

- "MIN"/"MAX" value of the outermost circumference of X axis and Y axis and reference value for A/D correction are displayed.
- "before" (red frame) indicates the outermost circumference value stored in the EEPROM.
  "after" (blue frame) indicates the MIN/MAX value of the outermost circumference value (A/D value) currently captured and the reference value for A/D correction.

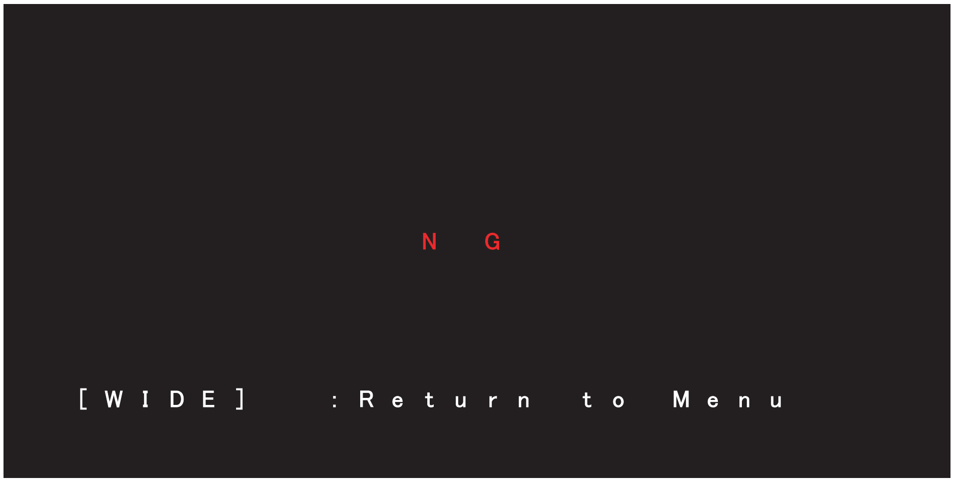
When terminated normally.



O.K

[WIDE] :Return to Menu

When the obtained value is outside of the allowable range.



NG

[WIDE] :Return to Menu

[Key operation specifications]

Operational description	Main unit key	Remote controller key
Inspection completed/To top menu	WIDE	MENU_ENTER

[Calibration verification]

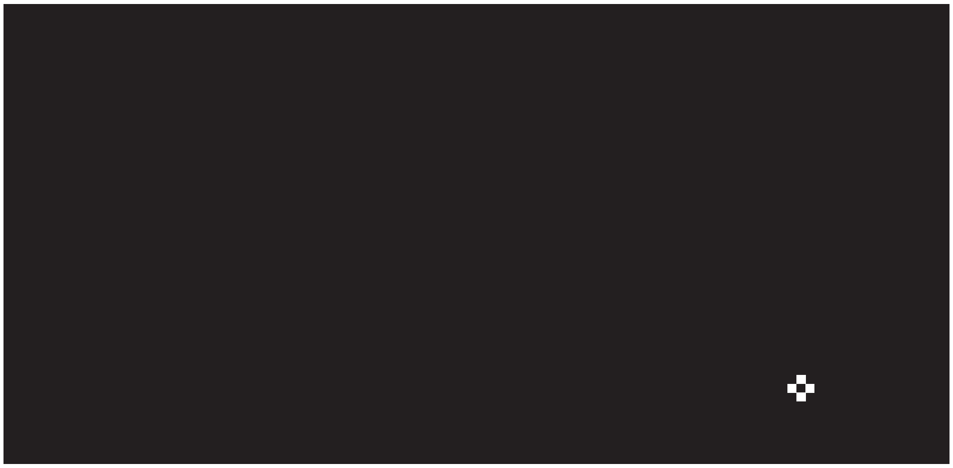
[Outline]

- Touch the center of the "+" cursor displayed on the screen. When touched correctly, the cursor will disappear, and the next cursor will be displayed.
  By repeating this 16 times, corrected value for each "+" point is obtained.
  When the 17th point is touched as the last step, the corrected values for the 16 points and normally terminated information are written into the EEPROM as a data of total 17 bytes. When the key is pressed, the screen will return to the top menu.

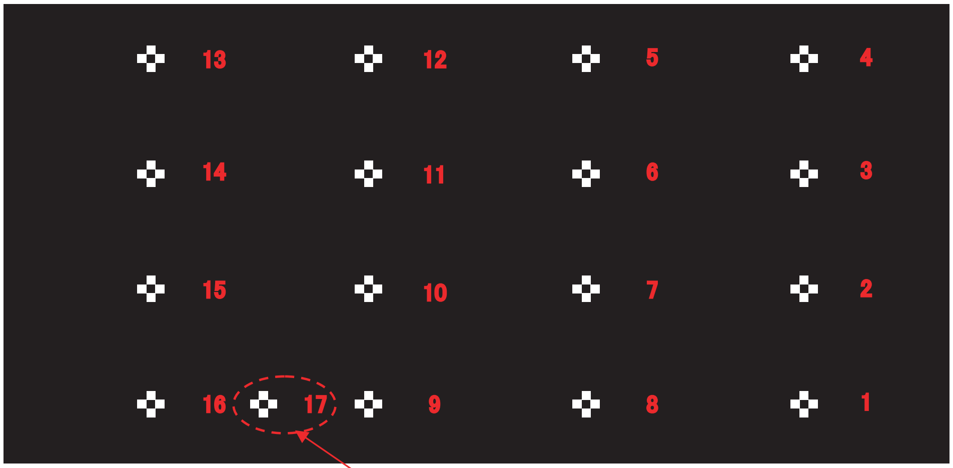
- Refer to "EEPROM setting items" for the destination where the set values are stored in the EEPROM.
  Refer to "calibration point" for the cursor displayed locations.

[Display specifications]

- **16 points adjustment in process**

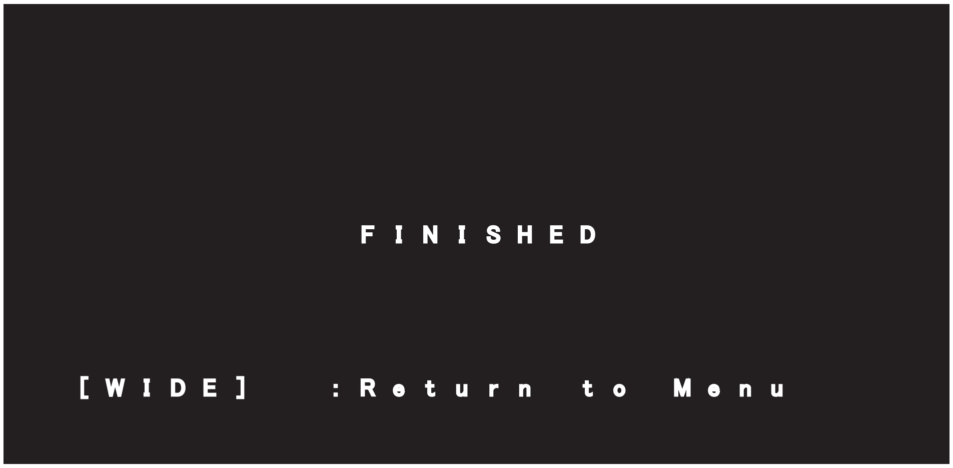


(Order of display of the locations to be pressed.)



※ This point is intended to end the calibration inspection, and therefore, the corrected value of this point is not obtained.

- **When terminated normally. (After pressing the 17th point.)**


FINISHED

[WIDE] :Return to Menu

- **Forced termination by ENTER key.**

  The screen will proceed to the top menu.

[Key operation specifications]

Operational description	Main unit key	Remote controller key
Forced termination/To top menu	WIDE	MENU_ENTER

[Touched coordinate verification]

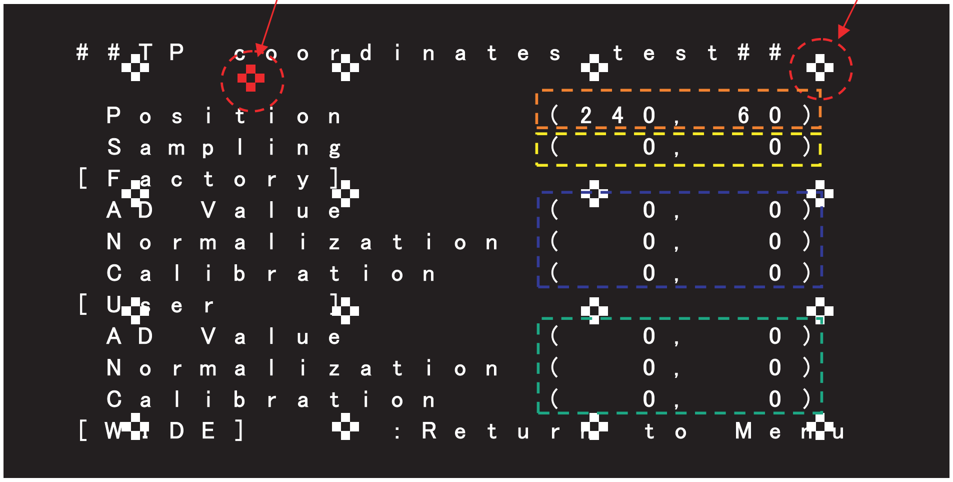
[Outline]

- The coordinate before correction and after correction at the time of pressing the touch panel are displayed for coordinate verification.
  Furthermore, the red "+" cursor can be moved by the key operaiont mentioned bellow, and the coordinate of the cursor center is displayed.
  16 "+" cursors in white are displayed at the location where a "+" cursor is displayed during the calibration inspection. (Fixed display)

[Display specifications]

Movable by the cross key(in red)

Fixed display(in white)



```
## TP coordinates test ##
   Position              ( 240,   60 )
   Sampling              (   0,    0 )
[ Factory ]
   AD Value              (   0,    0 )
   Normalization         (   0,    0 )
   Calibration           (   0,    0 )
[ User    ]
   AD Value              (   0,    0 )
   Normalization         (   0,    0 )
   Calibration           (   0,    0 )
[ WIDE ]     : Return to Menu
```

- Each displayed coordinate is as follows.
  ※The values under [Factory] are the corrected values in the Factory region and the values under [User] are the corrected values in the User region.
  - Position : X/Y coordinate of the "+" cursor (movable) is displayed. Movable range is (0, 0)~(799, 479).
  - Sampling : A/D value (X direction, Y direction) of the pressed point is displayed.
  - AD Value : The coordinate (X direction, Y direction) of the A/D value of the pressed point corrected by the reference value for A/D correction is displayed.
  - Normalization : The coordinate (X direction, Y direction) after normalizing the A/D corrected coordinate within the effective range is displayed. (0~255)
  - Calibration : The coordinate (X direction, Y direction) which is the result of adding the correction by calibration to the normalized coordinate is displayed.
- Movable "+" cursor is displayed in red.
- 16 calibration points are displayed in white.

[Key operation specifications]

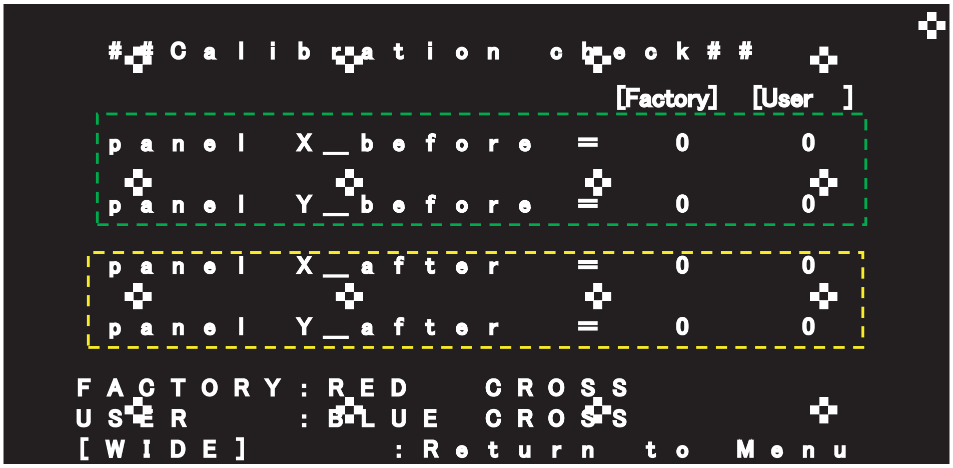
Operational description	Main unit key	Remote controller key
To top menu	WIDE	MENU_ENTER
Cursor up movement	BAND/ESC	↑
Cursor down movement	ATT	↓
Cursor left movement	PGM	←
Cursor right movement	DISP	→

[Calibration verification]

[Outline]

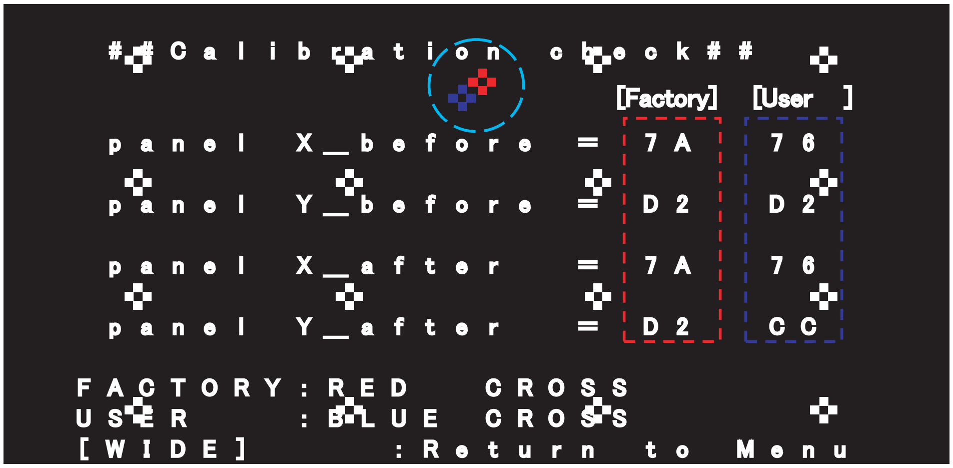
- The normalized coordinate and the coordinate after calibration correction at the time of pressing the touch panel are displayed for verification of the operation.
  A cross cursor (red, blue) is displayed at the pressed location.
  16 "+" cursors in white are displayed at the location where a "+" cursor is displayed during calibration.
  (It cannot be moved.)

[Display specifications]



```
## Calibration check ##
                         [Factory]  [User  ]
panel X_before  =        0          0
panel Y_before  =        0          0
panel X_after   =        0          0
panel Y_after   =        0          0
FACTORY:RED   CROSS
USER   :BLUE  CROSS
[WIDE]        :Return to Menu
```

- A display at the time of pressing the touch panel.



```
## Calibration check ##
                         [Factory]  [User  ]
panel X_before  =        7A         76
panel Y_before  =        D2         D2
panel X_after   =        7A         76
panel Y_after   =        D2         CC
FACTORY:RED   CROSS
USER   :BLUE  CROSS
[WIDE]        :Return to Menu
```

- Each displayed coordinate shall be as follows.
  ※The values under [Factory] are the corrected values in the Factory region and the values under [User] are the corrected values in the User region.
  - panel X_before : Normalized X coordinate of the pressed location.
  - panel Y_before : Normalized Y coordinate of the pressed location.
  - panel X_after : X coordinate of the pressed location after calibration correction.
  - panel Y_after : Y coordinate of the pressed location after calibration correction.
- "+" displayed at the pressed location is as follows.
  - Red "+": The location when the corrected value of the Factory region is used.
  - Blue "+": The location when the corrected value of the User region is used.
  ※When your finger is released from the touch panel, the cross cursor will continue to be displayed at the location where the finger pressed last.

[Key operation specifications]

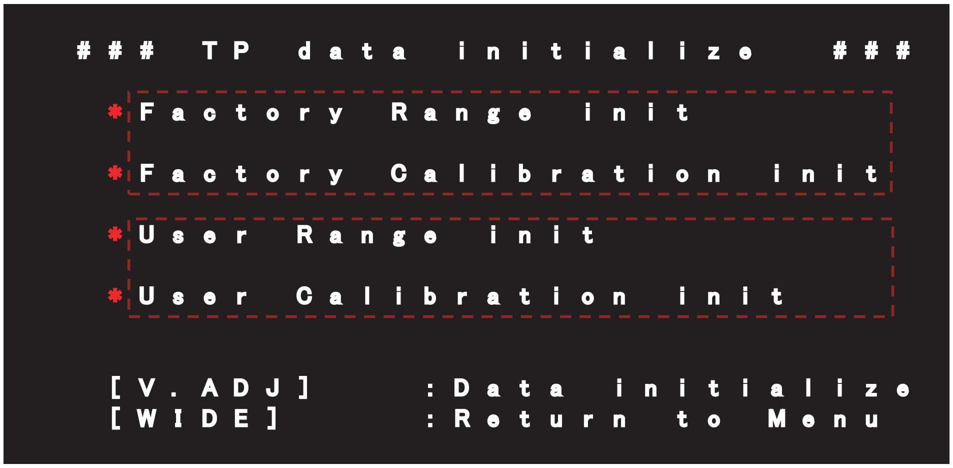
Operational description	Main unit key	Remote controller key
To top menu	WIDE	MENU_ENTER

[Data initialization]

[Outline]

- Result of outermost circumference inspection and of calibration inspection (corrected value) are returned to their initial values.
  As for the initialized items, the initial values are written into the EEPROM and the adjustment information is cleared.

[Display specifications]



```
### TP data initialize ###

*Factory Range init

*Factory Calibration init

*User Range init

*User Calibration init


[V.ADJ]      :Data initialize
[WIDE]       :Return to Menu
```

- Conditions for the adjustment completion mark (*) to be lighted up.
  (The mark will be lighted up if one of the multiple conditions is met.)
  - ☐ Outermost circumference inspection
    - When the outermost circumference inspection of the calibration for line has been completed normally.
  - ☐ 16 point adjustment
    - When the calibration inspection for line has been completed normally.
  - ☐ User outermost circumference inspection
    - When the outermost circumference inspection of calibration for line has been completed normally.
      (Because the writing is made to both the Factory region and the User region, **the user side will also be treated as adjusted.)**
    - When the outermost circumference inspection of the user calibration has been completed normally.
  - ☐ User 16 point adjustment
    - When the calibration inspection for line has been completed normally.
      (Because the writing is made to both the Factory region and the User region, **the user side will also be treated as adjusted.)**
    - When the calibration inspection of the user calibration has been completed normally.

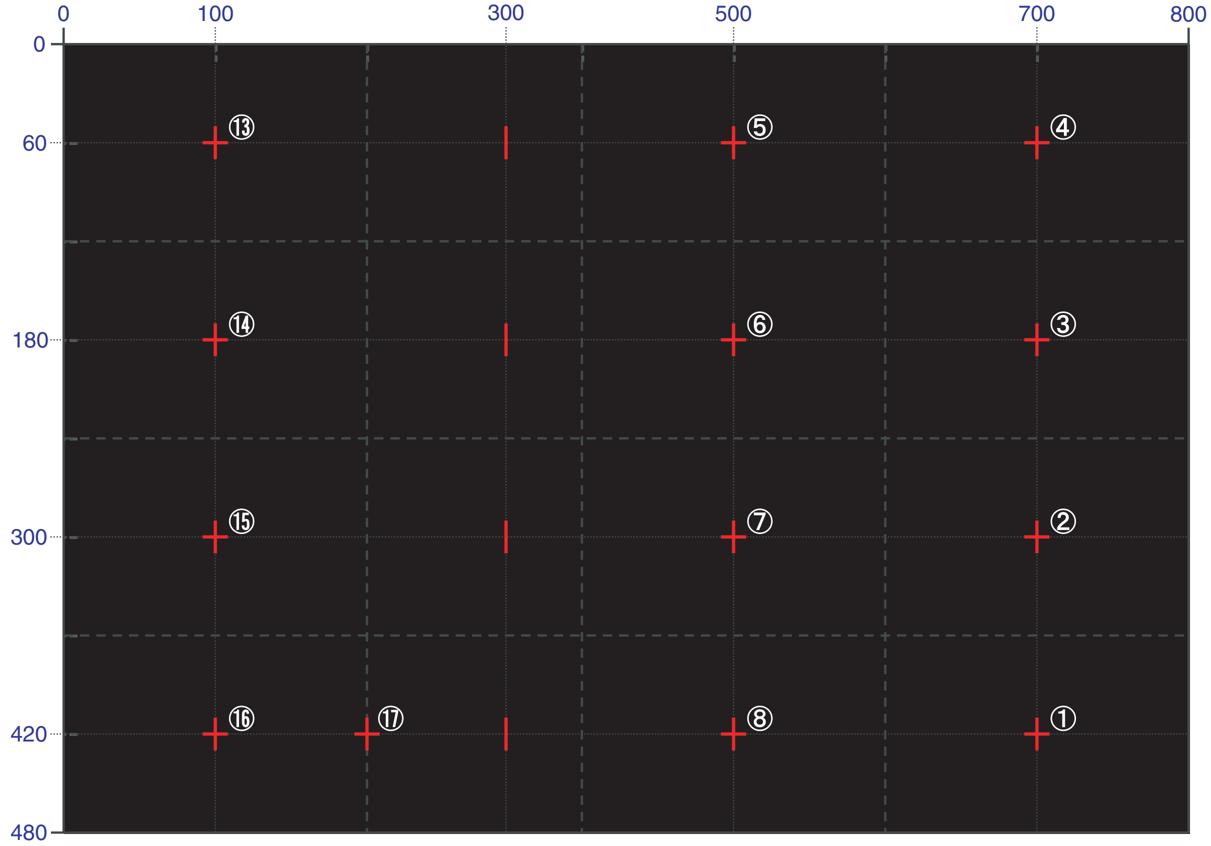
- Conditions for the adjustment completion mark (*) to go out.
  (The mark will go out if one of the multiple conditions is met.)
  - ☐ Outermost circumference inspection
    - When the above mentioned lighting conditions are not applicable.
    - When the adjusted value has been initialized (Data initialize).
    - When the EEPROM has been initialized.
  - ☐ 16 point adjustment
    - When the above mentioned lighting conditions are not applicable.
    - When the adjusted value has been initialized (Data initialize).
    - When the EEPROM has been initialized.
  - ☐ User outermost circumference inspection
    - When the above mentioned lighting conditions are not applicable.
    - When the adjusted value has been initialized (Data initialize).
    - When the EEPROM has been initialized.
  - ☐ User 16 point adjustment
    - When the above mentioned lighting conditions are not applicable.
    - When the adjusted value has been initialized (Data initialize).
    - When the EEPROM has been initialized.

[Key operation specifications]

Operational description	Main unit key	Remote controller key
Determination of initializing item	V.ADJ	BACK
Selected cursor up movement	DISP	↑
Selected cursor down movement	ATT	↓
To top menu	WIDE	MENU_ENTER

[Calibration point]

■ Locations of "+" displays (calibration points) displayed during calibration inspection are shown below.



8.6 PCL OUTPUT CONFIRMATION

● PCL output

In the normal operation mode (with the detachable panel installed, the ACC switched ON, the standby mode cancelled), shift the TESTIN (IC102 Pin 83) terminal to H.
The clock signal is output from the CLKOUT(IC102 Pin 86).
The clock signal should be 18.874 368 MHz ± 754 Hz.
If the clock signal is out of the range, the X'tal (X101) should be replaced with new one.

A

B

C

D

E

F

9. EXPLODED VIEWS AND PARTS LIST

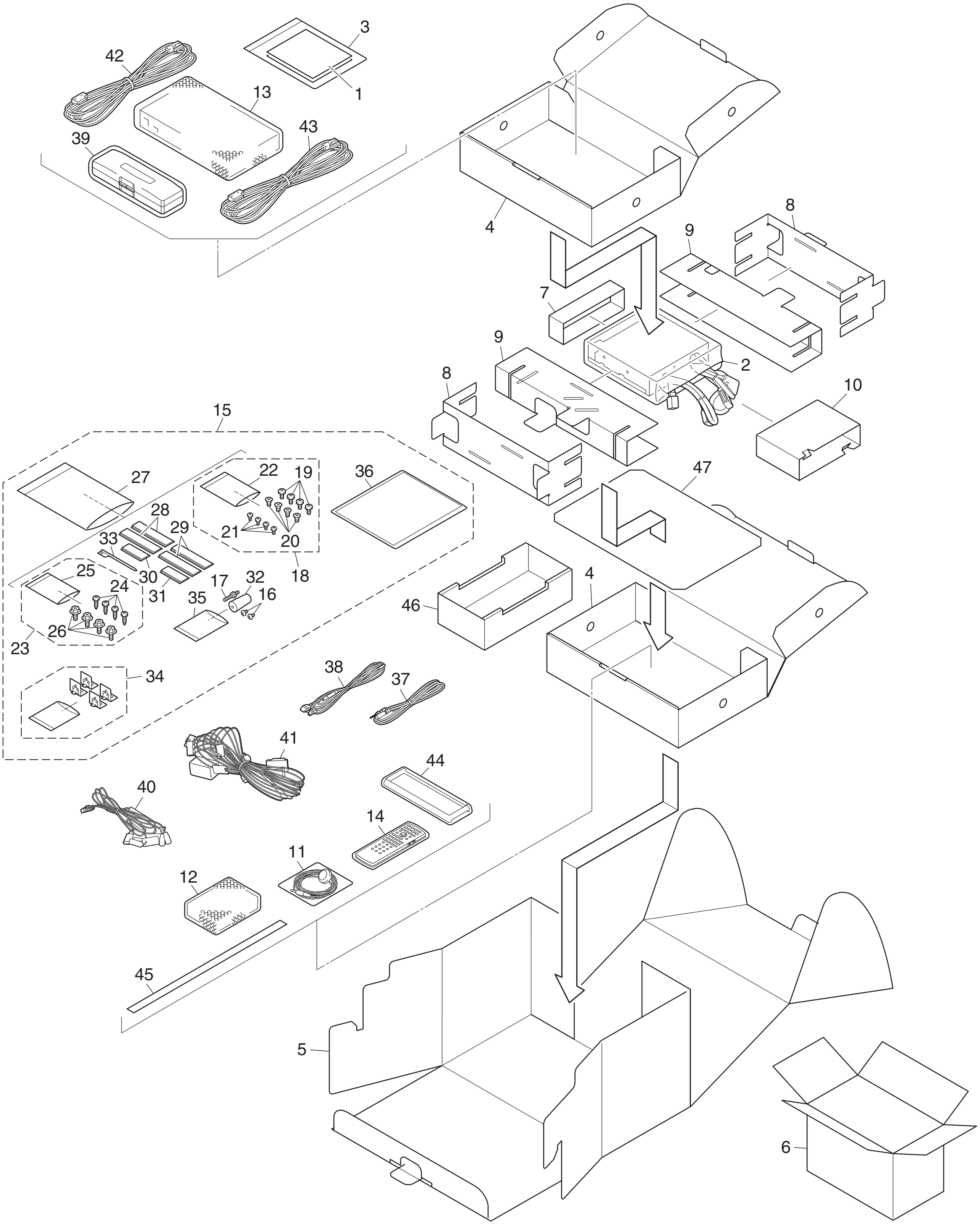
*NOTES : • Parts marked by " * " are generally unavailable because they are not in our Master Spare Parts List.*

• The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.

• Screw adjacent to▽mark on the product are used for disassembly.

• For the applying amount of lubricants or glue, follow the instructions in this manual. (In the case of no amount instructions,apply as you think it appropriate.)

9.1 PACKING


3
42
1
13
39
43
4
8
9
7
9
2
8
10
15
47
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22
19
36
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35
46
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37
41
44
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14
11
12
45
5
6

(1) PACKING SECTION PARTS LIST

Mark	No.	Description	Part No.
	1-1	Owner's Manual	See Contrast table(2)
	1-2	Owner's Manual	See Contrast table(2)
	1-3	Owner's Manual	See Contrast table(2)
	1-4	Installation Manual	See Contrast table(2)
	1-5	Caution Card	CRP1310
*	1-6	Warranty Card	See Contrast table(2)
	2	Polyethylene Bag	CEG1088
	3	Polyethylene Bag	CEG1116
	4	Sub Unit Box	CHA3567
	5	Unit Box	See Contrast table(2)
	6	Contain Box	See Contrast table(2)
	7	Protector	CHP2432
	8	Protector	CHP3204
	9	Protector	CHP3205
	10	Protector	CHP3206
	11	Microphone Assy	CPM1066
	12	Air Cushioned Bag	CEG1081
	13	Air Cushioned Bag	CEG1007
	14	Remote Control Assy	CXC6273
*	15	Accessory Assy	CXC8249
	16	Screw	BPZ20P050FTB
	17	Screw	CBA1650
	18	Screw Assy	CEA5144
	19	Screw	BMZ50P060FTC
	20	Screw(M4 x 3)	CBA1870
	21	Screw	CMZ50P060FTC

Mark	No.	Description	Part No.
*	22	Polyethylene Sheet	CNM4338
	23	Screw Assy	CEA5278
	24	Screw	BNC40P120FTB
*	25	Polyethylene Bag	CEG1158
	26	Screw	HMF40P080FTB
	27	Polyethylene Bag	CEG1161
	28	Fastener	CNM3728
	29	Fastener	CNM3729
	30	Fastener	CNM6544
	31	Fastener	CNM6545
	32	Bush	CNV3930
	33	Pen	CNV8969
	34	Angle Assy	CXC6835
*	35	Polyethylene Bag	E36-615
	36	Cleaning Cloth	VED1010
	37	Antenna Cable	CDH1265
	38	Cord Assy	CDE7321
	39	Case Unit	CXC7488
	40	Cord Assy	CDE8086
	41	Cord Assy	CDE8088
	42	Cord Assy	CDE8091
	43	Cord Assy	CDE8092
	44	Panel	See Contrast table(2)
	45	Sheet	CNM8603
	46	Protector	CHP3276
	47	Protector	CHP3364

(2) CONTRAST TABLE

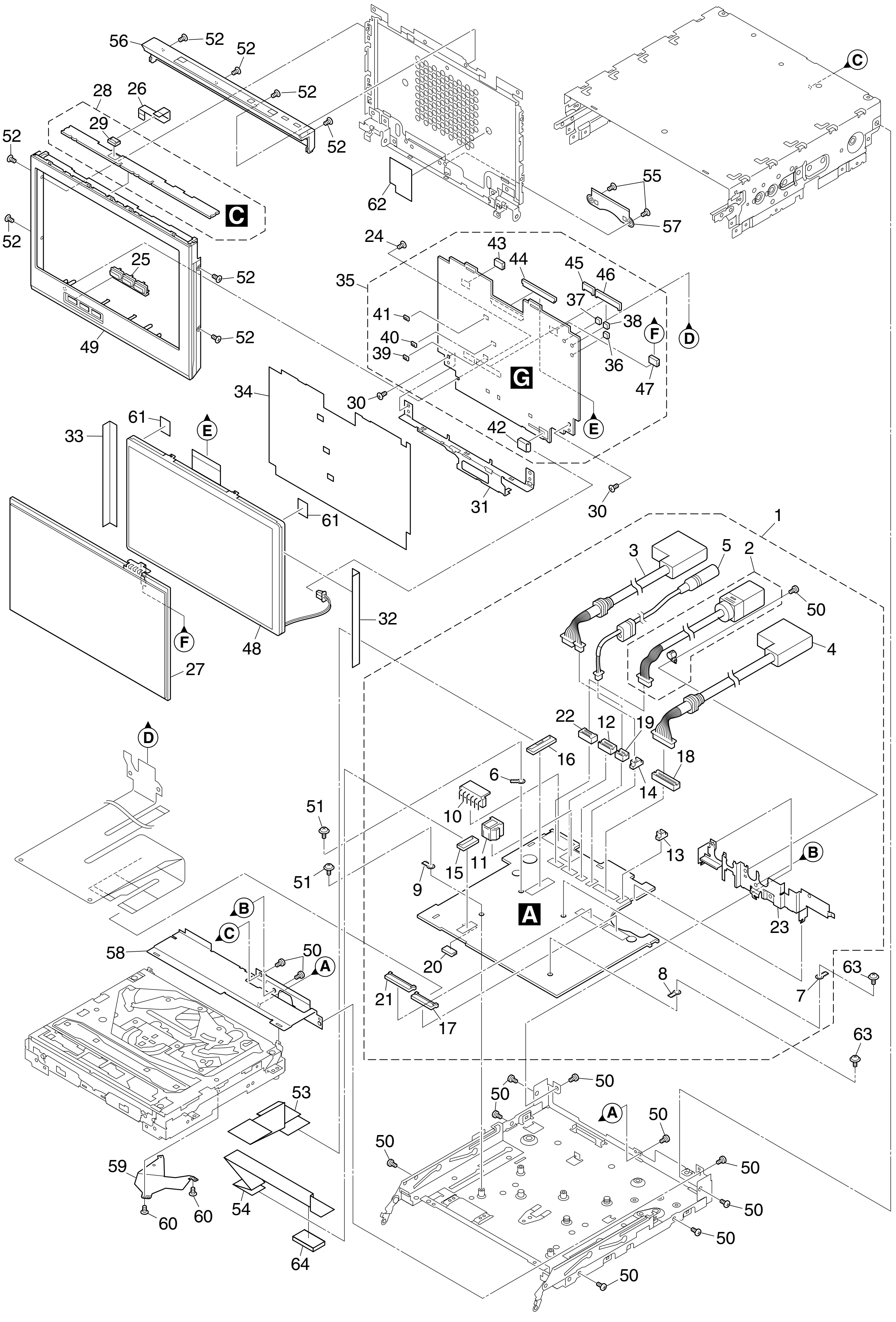
"AVH-P7950DVD/RC, AVH-P7950DVD/RD, AVH-P7950DVD/RI and AVH-P7950DVD/CN5 are constructed the same except for the following:"

Mark	No.	Description	RC	RD	RI	CN5
	1-1	Owner's Manual	CRB2413	CRB2413	CRB2413	Not used
	1-2	Owner's Manual	CRB2414	CRB2415	CRB2417	CRB2418
	1-3	Owner's Manual	Not used	CRB2416	Not used	Not used
	1-4	Installation Manual	CRD4229	CDR4230	CRD4231	CRB2419
*	1-6	Warranty Card	Not used	Not used	Not used	ARY7046
	5	Unit Box	CHG6180	CHG6181	CHG6181	CHG6179
	6	Contain Box	CHL6180	CHL6181	CHL6183	CHL6179
	44	Panel	CNS8691	CNS8689	CNS8689	CNS8689

Owner's Manual,Installation Manual

Part No.	Language
CRB2413	English
CRB2414	Traditional Chinese
CRD4229	English, Traditional Chinese
CRB2415	Spanish
CRB2416	Portuguese(B)
CRD4230	English, Spanish, Portuguese(B)
CRB2417	Arabic
CRD4231	English, Arabic
CRB2418	Simplified Chinese
CRB2419	Simplified Chinese

9.2 EXTERIOR(1)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(1) EXTERIOR(1) SECTION PARTS LIST

Mark	No.	Description	Part No.
	1	DVD Mother Unit	See Contrast table(2)
	2	Cord Assy	CDE8097
	3	Cord Assy	CDE8095
	4	Cord Assy	CDE8094
	5	Cord Assy	CDE8093
	6	Terminal(CN951)	CKF1064
	7	Terminal(CN952)	CKF1064
	8	Terminal(CN3301)	CKF1064
	9	Terminal(CN3302)	CKF1064
	10	Plug(CN232)	CKS-463
	11	Connector(CN3201)	CKS2600
	12	Connector(CN752)	CKS5566
	13	Connector(CN871)	CKS4822
	14	Connector(CN851)	CKS4823
	15	Connector(CN701)	CKS5045
	16	Connector(CN702)	CKS5100
	17	Connector(CN571)	CKS5113
	18	Connector(CN751)	CKS5492
	19	Connector(CN753)	CKS5494
	20	Connector(CN651)	CKS5501
	21	Connector(CN572)	CKS5533
	22	Connector(CN231)	CKS4674
	23	Holder	CND3497
	24	Screw	BPZ20P060FTC
	25	Button	CAI1456
	26	Flat Cable	CDE8105
	27	Touch Panel	CSX1098
	28	Sub Keyboard Unit	CWN2486
	29	Connector(CN6001)	CKS5033
	30	Screw(M2 x 2)	CBA1872
	31	Holder	CND3222
	32	Sheet	CNN1071

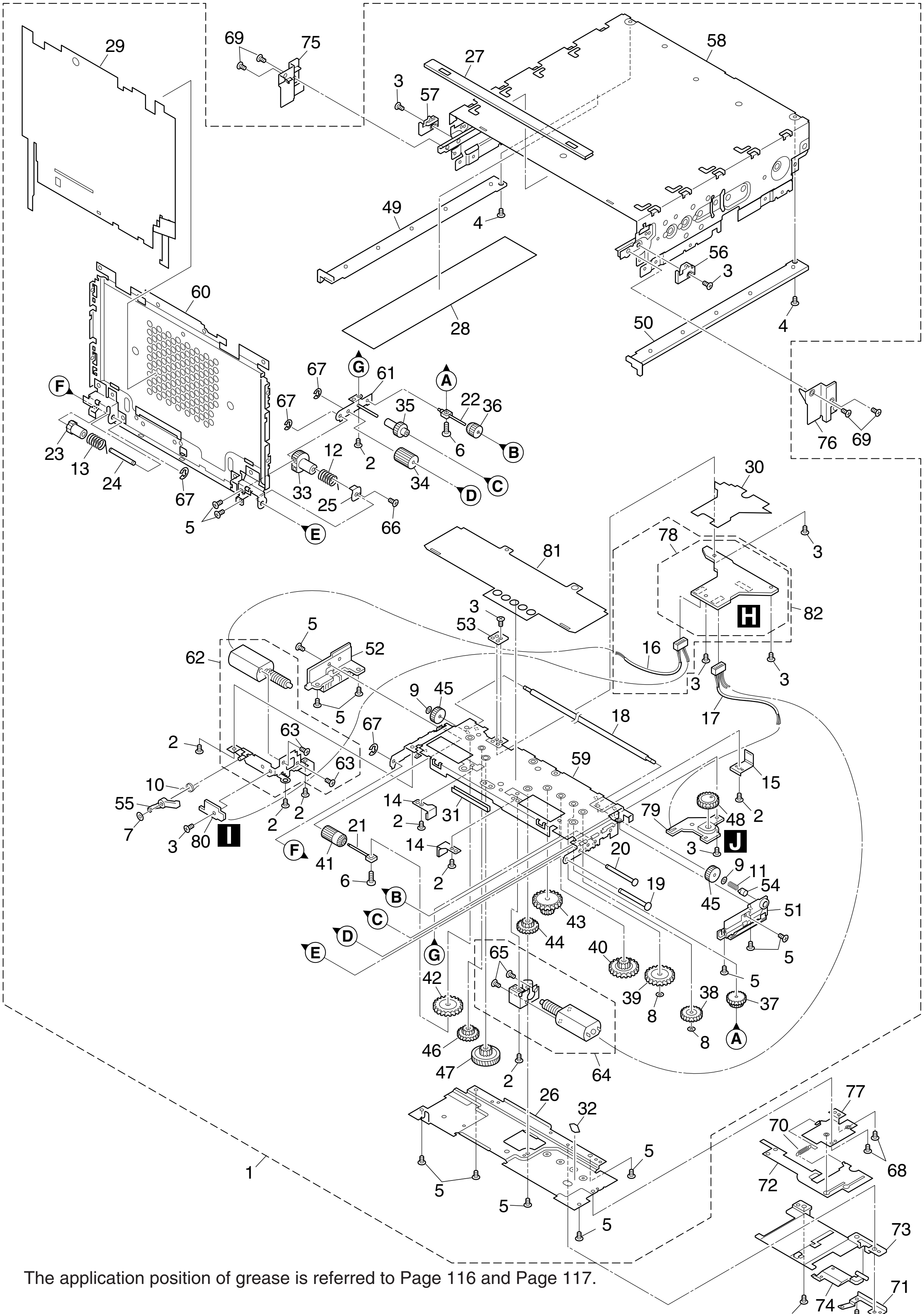
Mark	No.	Description	Part No.
	33	Sheet	CNN1072
	34	Insulator	CNN1073
	35	Monitor Unit	CWN2483
	36	Checker Chip(CN4001)	CKF1031
	37	Checker Chip(CN4002)	CKF1031
	38	Checker Chip(CN4003)	CKF1031
	39	Terminal(CN5603)	CKF1068
	40	Terminal(CN5604)	CKF1068
	41	Terminal(CN5605)	CKF1068
	42	Connector(CN5501)	CKS4428
	43	Connector(CN4801)	CKS5033
	44	Connector(CN5301)	CKS5111
	45	Connector(CN5602)	CKS5532
	46	Connector(CN5601)	CKS5533
	47	Connector(CN4701)	CKS5561
	48	LCD Module	CWX3341
	49	Grille Unit	CXC8067
	50	Screw	BMZ26P030FTC
	51	Screw(M2 x 2.5)	CBA1624
	52	Screw(M2 x 2)	CBA1872
	53	Flat Cable	CDE8433
	54	Flat Cable	CDE8432
	55	Screw(M2 x 1.4)	CBA2042
	56	Cover Unit	See Contrast table(2)
	57	Holder	CND3271
	58	Holder	CND3210
	59	Cover	CND3639
	60	Screw	JFZ20P018FTC
	61	Sheet	CNN1524
	62	Sheet	CNN1525
	63	Screw	IMS20P050FTB
	64	Sheet	CNN1781

(2) CONTRAST TABLE

"AVH-P7950DVD/RC, AVH-P7950DVD/RD, AVH-P7950DVD/RI and AVH-P7950DVD/CN5 are constructed the same except for the following:"

Mark	No.	Description	RC	RD	RI	CN5
	1	DVD Mother Unit	CWN2477	CWN2478	CWN2479	CWN2480
	56	Cover Unit	CXC8057	CXC8058	CXC8058	CXC8058

9.3 EXTERIOR(2)



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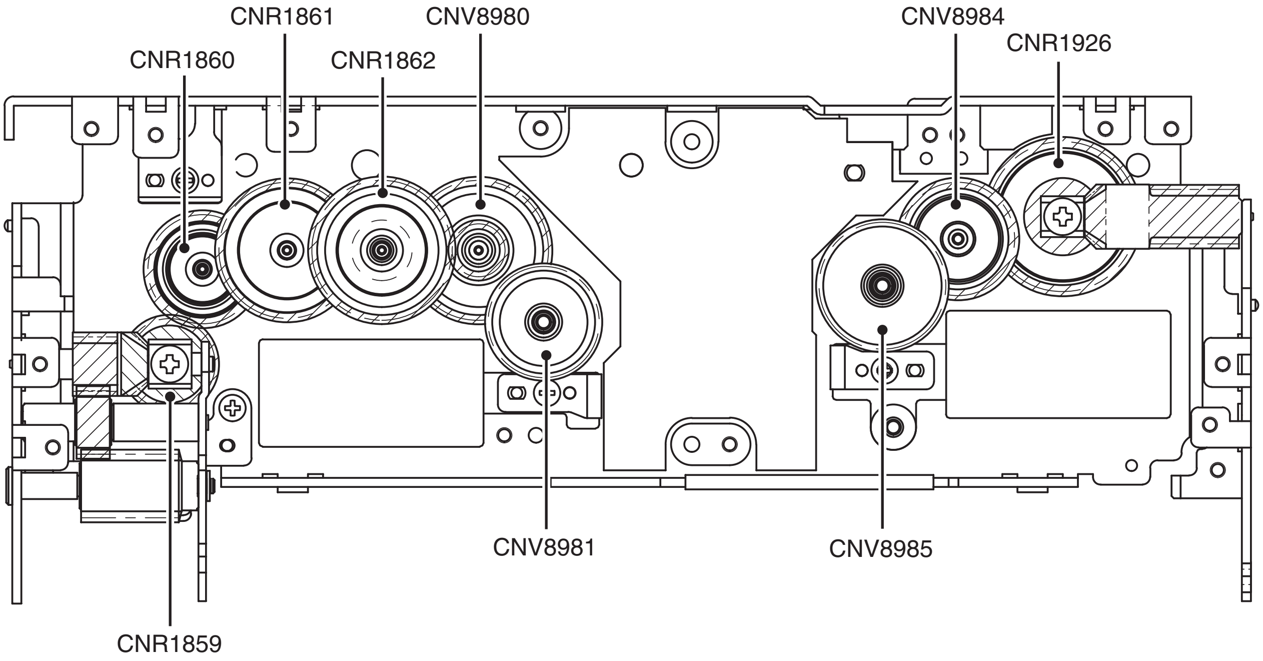
The application position of grease is referred to Page 116 and Page 117.

EXTERIOR(2) SECTION PARTS LIST

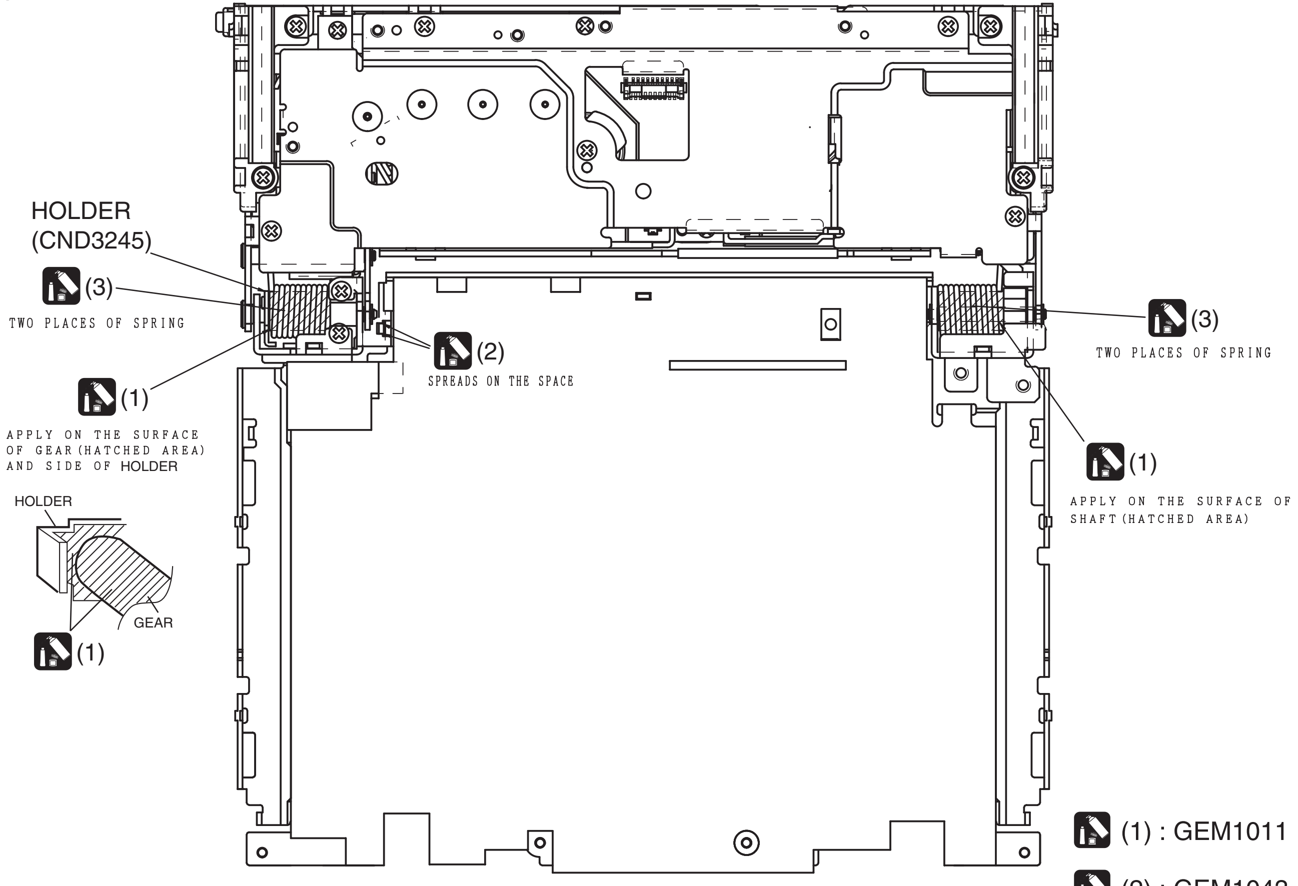
Mark	No.	Description	Part No.
	1	Drive Unit	CXC6148
	2	Screw(M2 x 2)	CBA1608
	3	Screw(M2 x 1.5)	CBA1615
	4	Screw(M2 x 2)	CBA1872
	5	Screw(M2 x 3)	CBA1877
	6	Screw(M2.3 x 6)	CBA2027
	7	Washer	CBF1037
	8	Washer	CBF1039
	9	Washer	CBF1064
	10	Spring	CBH2906
	11	Spring	CBH2907
	12	Spring	CBH2908
	13	Spring	CBH2909
	14	Spring	CBL1723
	15	Spring	CBL1734
	16	Cord	CDE8127
	17	Cord	CDE8128
	18	Shaft	CLA4651
	19	Shaft	CLA4661
	20	Shaft	CLA4662
	21	Shaft	CLA4663
	22	Shaft	CLA4664
	23	Shaft	CLA4665
	24	Shaft	CLA4666
	25	Holder	CND3245
	26	Cover	CND3252
	27	Sheet	CNN1055
	28	Sheet	CNN1056
	29	Insulator	CNN1057
	30	Insulator	CNN1058
	31	Sheet	CNN1065
	32	Insulator	CNN1068
	33	Gear	CNR1855
	34	Gear	CNR1856
	35	Gear	CNR1857
	36	Gear	CNR1925
	37	Gear	CNR1859
	38	Gear	CNR1860
	39	Gear	CNR1861
	40	Gear	CNR1862
	41	Gear	CNR1864
	42	Gear	CNR1926
	43	Gear	CNV8980
	44	Gear	CNV8981
	45	Gear	CNV8983
	46	Gear	CNV8984
	47	Gear	CNV8985
	48	Gear	CNV8987
	49	Rack	CNV8995

Mark	No.	Description	Part No.
	50	Rack	CNV8996
	51	Guide	CNV8997
	52	Guide	CNV8998
	53	Guide	CNV8999
	54	Lever	CNV9000
	55	Arm	CNV9001
	56	Guide	CNV9003
	57	Guide	CNV9004
	58	Chassis Unit	CXC6142
	59	Frame Unit	CXC6143
	60	Case Unit	CXC6144
	61	Holder Unit	CXC6145
	62	Motor Unit	CXC6638
	63	Screw	JGZ20P025FTC
	64	Motor Unit	CXC6639
	65	Screw	JGZ20P025FTC
	66	Screw	JFZ17P025FTC
	67	Washer	YE15FTC
	68	Screw(M2 x 3)	CBA1797
	69	Screw	CBA2041
	70	Spring	CBH2750
	71	Spring	CBL1720
	72	Lever	CND3250
	73	Cover	CNV9002
	74	Arm	CNV9005
	75	Panel	CNV9008
	76	Panel	CNV9009
	77	Bracket Unit	CXC6147
*	78	Main PCB Unit	CZW5027
*	79	Volume PCB Unit	CZW5028
*	80	Switch PCB Unit	CZW5029
*	81	Insulator	CNN1349
	82	Main PCB Unit(Service)	CXX2316

● The gear assembly figure of the Drive Unit


CNR1861
CNV8980
CNV8984
CNR1926
CNR1860
CNR1862
CNV8981
CNV8985
CNR1859

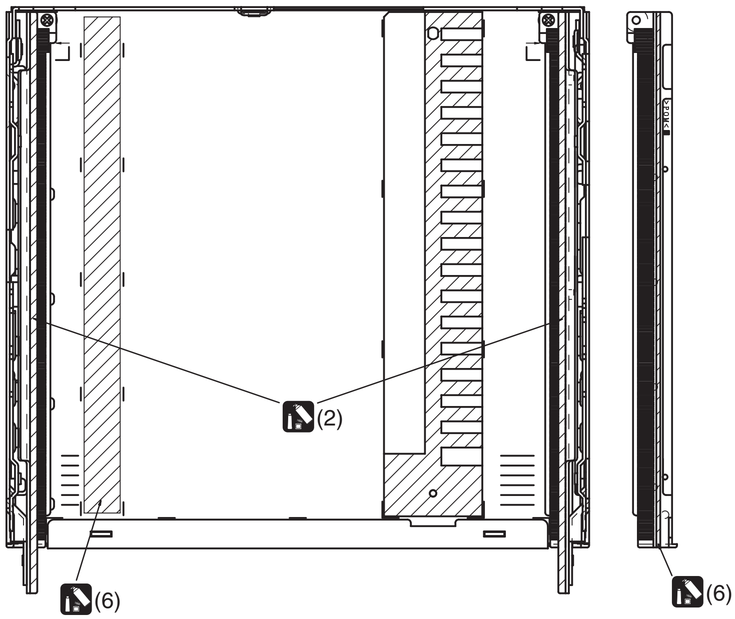
● Grease

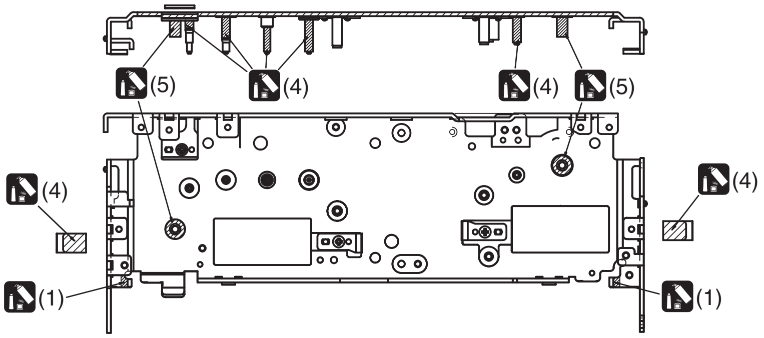

HOLDER
(CND3245)
(3)
TWO PLACES OF SPRING
(2)
SPREADS ON THE SPACE
(1)
APPLY ON THE SURFACE
OF GEAR(HATCHED AREA)
AND SIDE OF HOLDER
HOLDER
GEAR
(1)
(3)
TWO PLACES OF SPRING
(1)
APPLY ON THE SURFACE OF
SHAFT(HATCHED AREA)

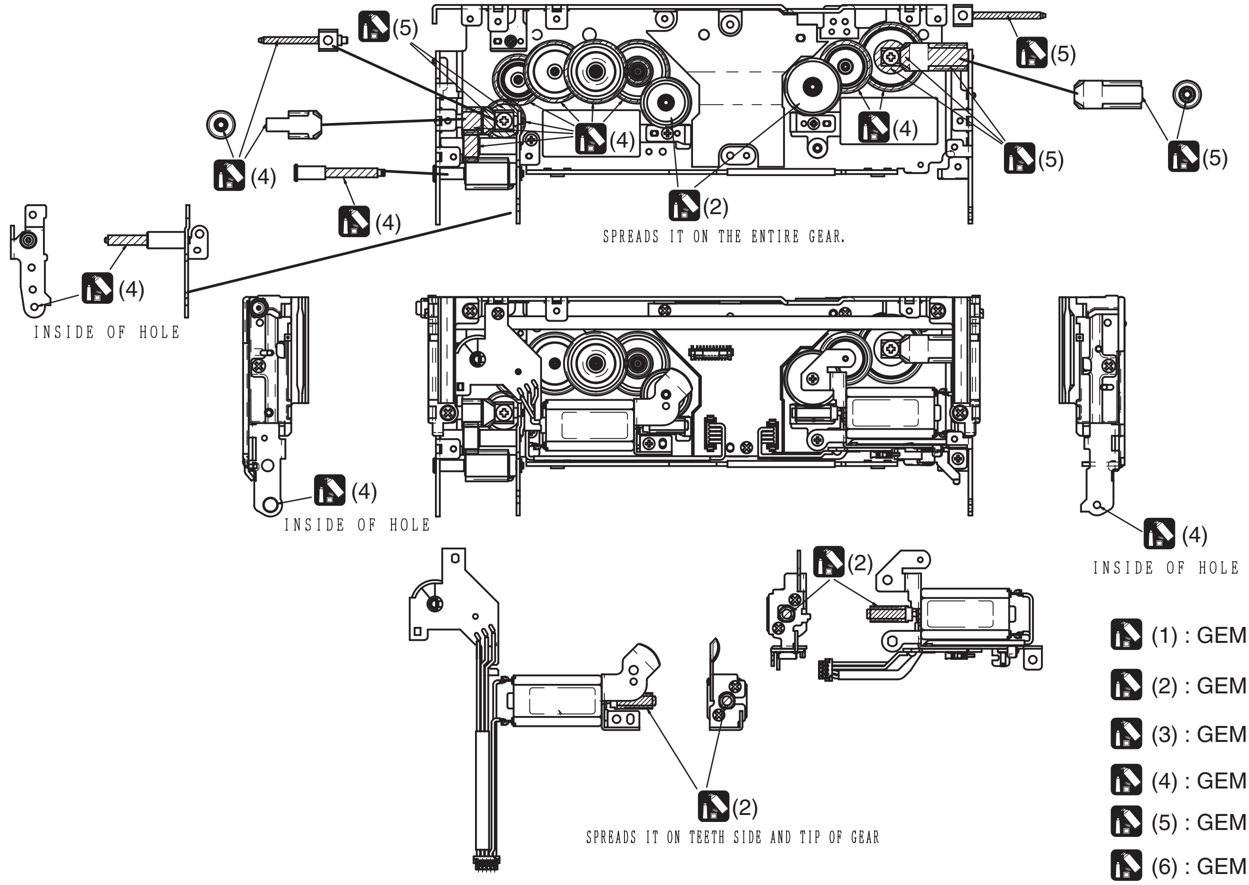
(1) : GEM1011

(2) : GEM1043

(3) : GEM1047



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SPREADS IT ON THE ENTIRE GEAR.
(4)
INSIDE OF HOLE
(4)
INSIDE OF HOLE
(4)
INSIDE OF HOLE
(2)
(2)
SPREADS IT ON TEETH SIDE AND TIP OF GEAR

(1) : GEM1011

(2) : GEM1043

(3) : GEM1047

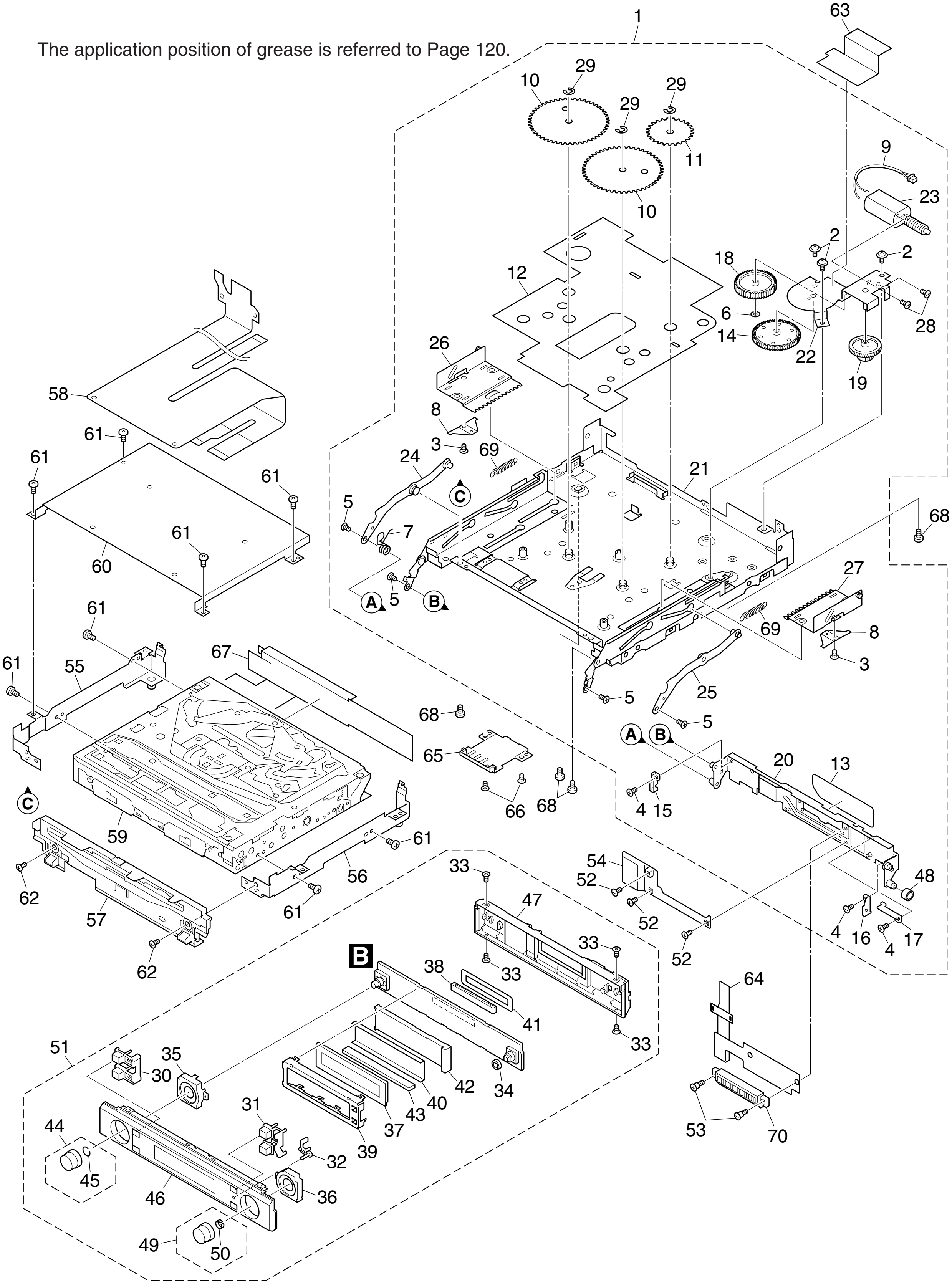
(4) : GEM1024

(5) : GEM1072

(6) : GEM1071

9.4 EXTERIOR(3)

The application position of grease is referred to Page 120.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(1) EXTERIOR(3) SECTION PARTS LIST

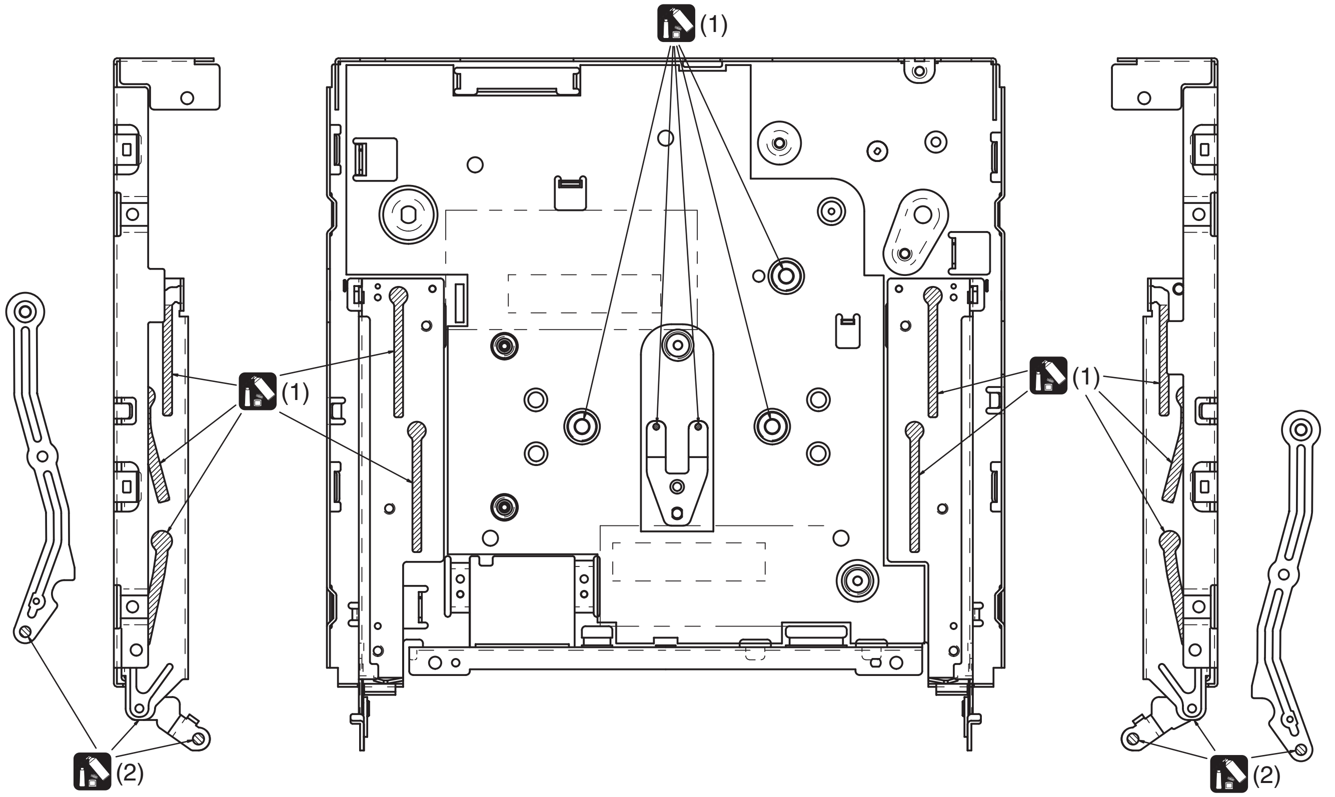
Mark	No.	Description	Part No.
	1	Drive Unit	CXC8030
	2	Screw	AMZ26P030FTC
	3	Screw(M2 x 1.4)	CBA2025
	4	Screw(M2 x 2)	CBA1871
	5	Screw(M2 x 2.5)	CBA2026
	6	Washer	CBF1039
	7	Spring	CBH2905
	8	Spring	CBL1718
	9	Cord	CDE8121
	10	Gear	CND3231
	11	Gear	CND3232
	12	Insulator	CNN1060
	13	Spacer	CNN1258
	14	Gear	CNR1853
	15	Guide	CNV8954
	16	Guide	CNV8955
	17	Guide	CNV8956
	18	Gear	CNV8974
	19	Gear	CNV8975
	20	Holder Unit	CXC6076
*	21	Case Unit	CXC8031
	22	Bracket Unit	CXC6121
	23	Motor Unit	CXC6122
	24	Arm Unit	CXC6123
	25	Arm Unit	CXC6124
	26	Frame Unit	CXC6125
	27	Frame Unit	CXC6126
	28	Screw	JGZ20P025FTC
	29	Washer	YE30FTC
	30	Button	CAI1316
	31	Button	CAI1317
	32	Button	CAC9684
	33	Screw(M2 x 2)	CBA1872
	34	Cushion	CNN1259
	35	Lighting Conductor	CNV8959
	36	Lighting Conductor	CNV8960
	37	LCD(LCD7001)	CAW1921
	38	Connector(CN7401)	CKS5502
	39	Holder	CND3214
	40	Sheet	CNM9990
	41	Spacer	CNN1257
	42	Lighting Conductor	CNV8965
	43	Connector	CNV8966
	44	Knob Unit	CXC8060
	45	Spring	CBL1721
	46	Grille Unit	See Contrast table(2)
	47	Cover Unit	CXC7171
*	48	Tube	CDM1037
	49	Button Unit	CXC8061
	50	Spring	CBL1733
	51	Grille Assy	See Contrast table(2)
	52	Screw(M2 x 2)	CBA1871
	53	Screw	CBA2009
	54	Guide	CNV8957
	55	Bracket Assy	CXC6106
	56	Bracket Assy	CXC6107
	57	Panel Unit	CXC7164
	58	Flexible PCB	CNP9204
	59	DVD Mechanism Module(MS5AVCODE2)	CXK6630
	60	Bracket	CND3213
	61	Screw	BMZ20P030FTB
	62	Screw	IMS26P030FTB
	63	Sheet	CNN1262
	64	Flexible PCB	CNP9258
	65	Guide	CNV9015
	66	Screw(M2 x 2)	CBA1872
	67	Sheet	CNN1643
	68	Screw	TMS26P030FTC
	69	Spring	CBH2953
	70	Connector	CKS5503

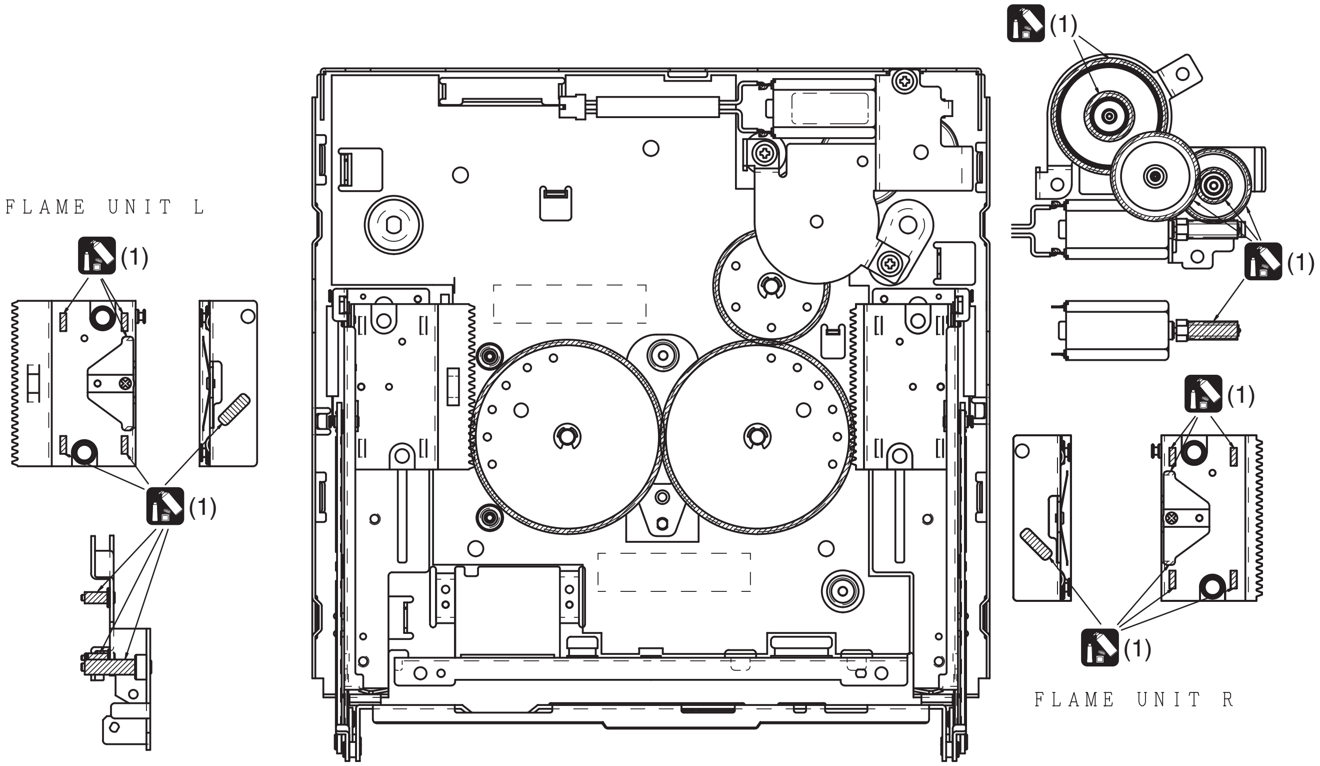
(2) CONTRAST TABLE

"AVH-P7950DVD/RC, AVH-P7950DVD/RD, AVH-P7950DVD/RI and AVH-P7950DVD/CN5 are constructed the same except for the following:"

Mark	No.	Description	RC	RD	RI	CN5
	46	Grille Unit	CXC8063	CXC8064	CXC8064	CXC8064
	51	Grille Assy	CXC7695	CXC7696	CXC7697	CXC7698

● Grease




FLAME UNIT L
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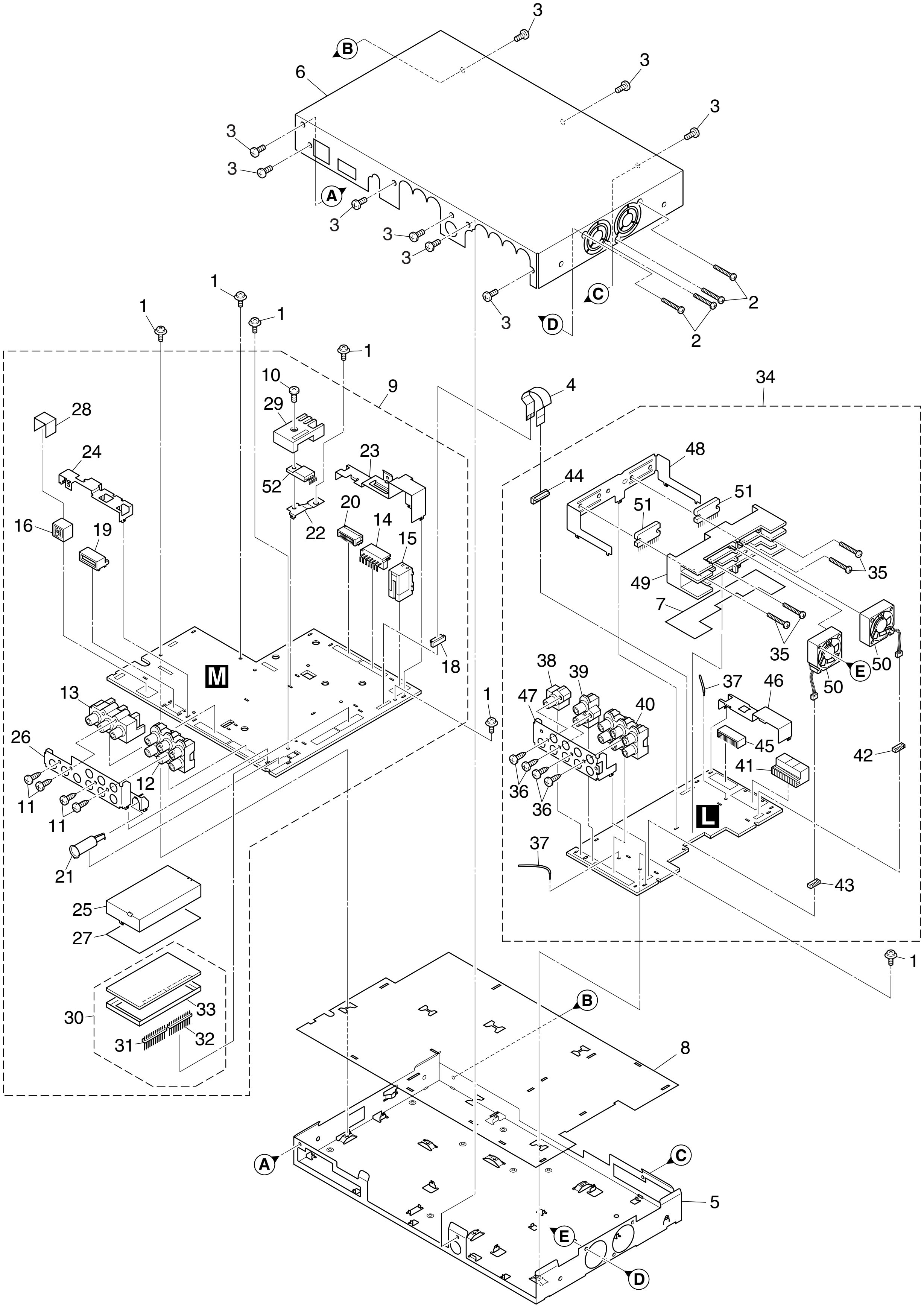
FLAME UNIT R

(1) : GEM1024

(2) : GEM1070

9.5 TUNER SELECTOR ASSY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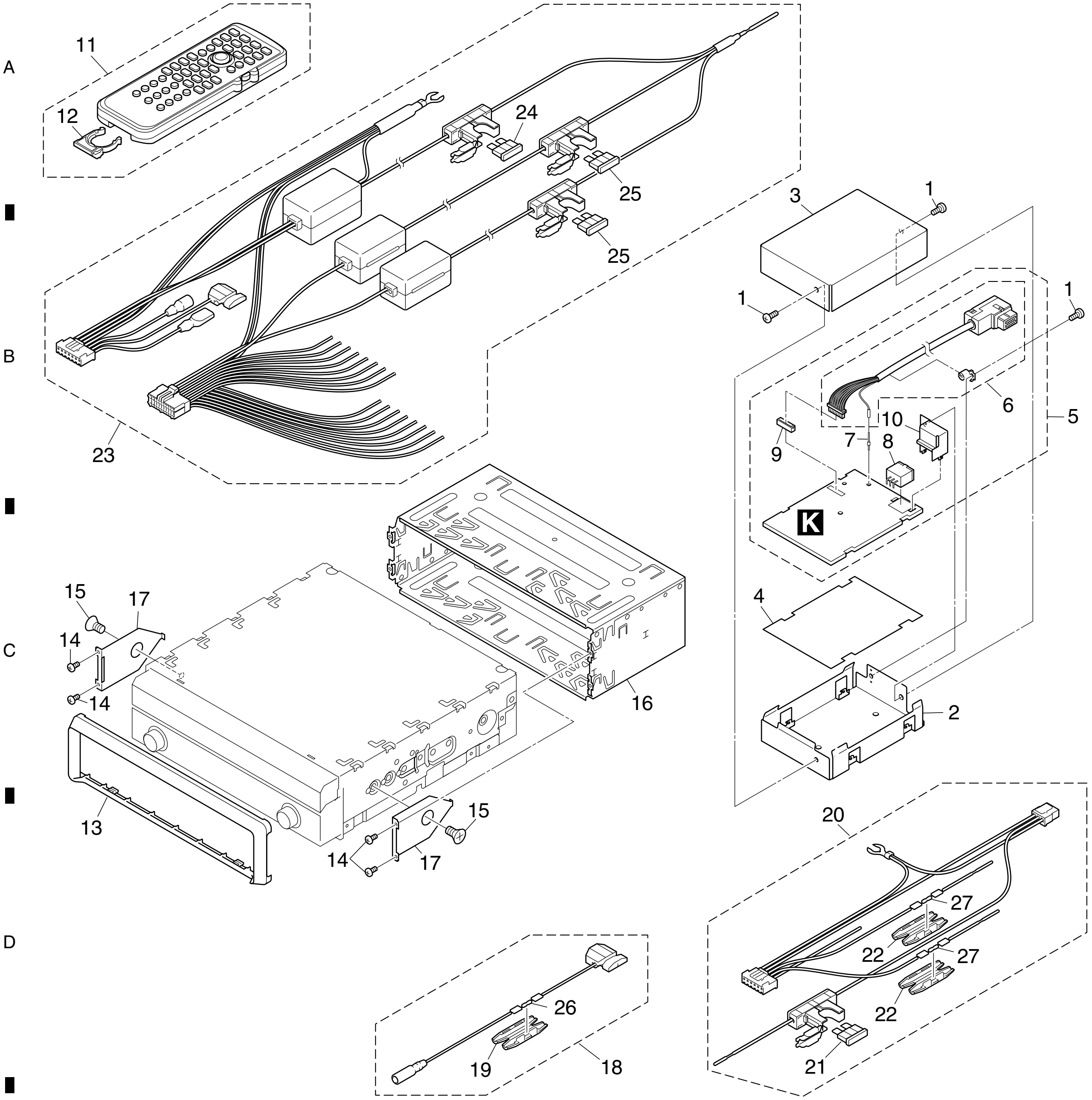
TUNER SELECTOR ASSY SECTION PARTS LIST

Mark	No.	Description	Part No.
	1	Screw	ASZ26P050FTC
	2	Screw	BMZ20P160FTC
	3	Screw	BSZ30P060FTB
	4	Flat Cable	CDE8100
	5	Chassis	CNA2889
	6	Case	CNB3427
	7	Insulator	CNM9984
	8	Insulator	CNN1313
	9	Tuner Selector Unit	CWN2491
	10	Screw	BMZ30P080FTC
	11	Screw	BPZ30P060FTC
	12	Pin Jack(CN8251)	CKB1076
	13	Pin Jack(CN8751)	CKB1075
	14	Plug(CN8701)	CKS-464
	15	Connector(CN8201)	CKS2602
	16	Connector(CN8451)	CKS4590
	17	•••••	
	18	Connector(CN8401)	CKS5066
	19	Connector(CN8901)	CKS5497
	20	Connector(CN8601)	CKS5500
	21	Antenna Jack(CN8502)	CKX1056
	22	Holder	CNC9888
	23	Holder	CND3202
	24	Holder	CND3204
	25	Shield	CND3206
	26	Holder	CND3201
	27	Insulator	CNM9521
	28	Insulator	CNN1356
	29	Heat Sink	CNR1879
	30	FM/AM Tuner Unit(Y8501)	CWE1806
	31	Connector(CN101)	CKS4653
	32	Connector(CN102)	CKS4653
	33	Holder	CND2145
	34	Amp Unit	CWN2493
	35	Screw	BMZ26P200FTC
	36	Screw	BPZ30P060FTC
	37	Clamper	CEF1042
	38	Pin Jack(CN9443)	CKB1073
	39	Pin Jack(CN9442)	CKB1074
	40	Pin Jack(CN9441)	CKB1077
	41	Socket(CN9001)	CKM1446
	42	Connector(CN9011)	CKS4822
	43	Connector(CN9012)	CKS4822
	44	Connector(CN9452)	CKS5066
	45	Connector(CN9451)	CKS5560
	46	Holder	CND3198
	47	Holder	CND3199
	48	Holder	CND3200
	49	Heat Sink	CNR1852
	50	Motor	CXM1246
	51	IC(IC9321, 9322)	PAL007B
	52	IC(IC8504)	NJM2388F84

9.6 ACCESSORY AND POWER SUPPLY UNIT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(1) ACCESSORY AND POWER SUPPLY UNIT SECTION PARTS LIST

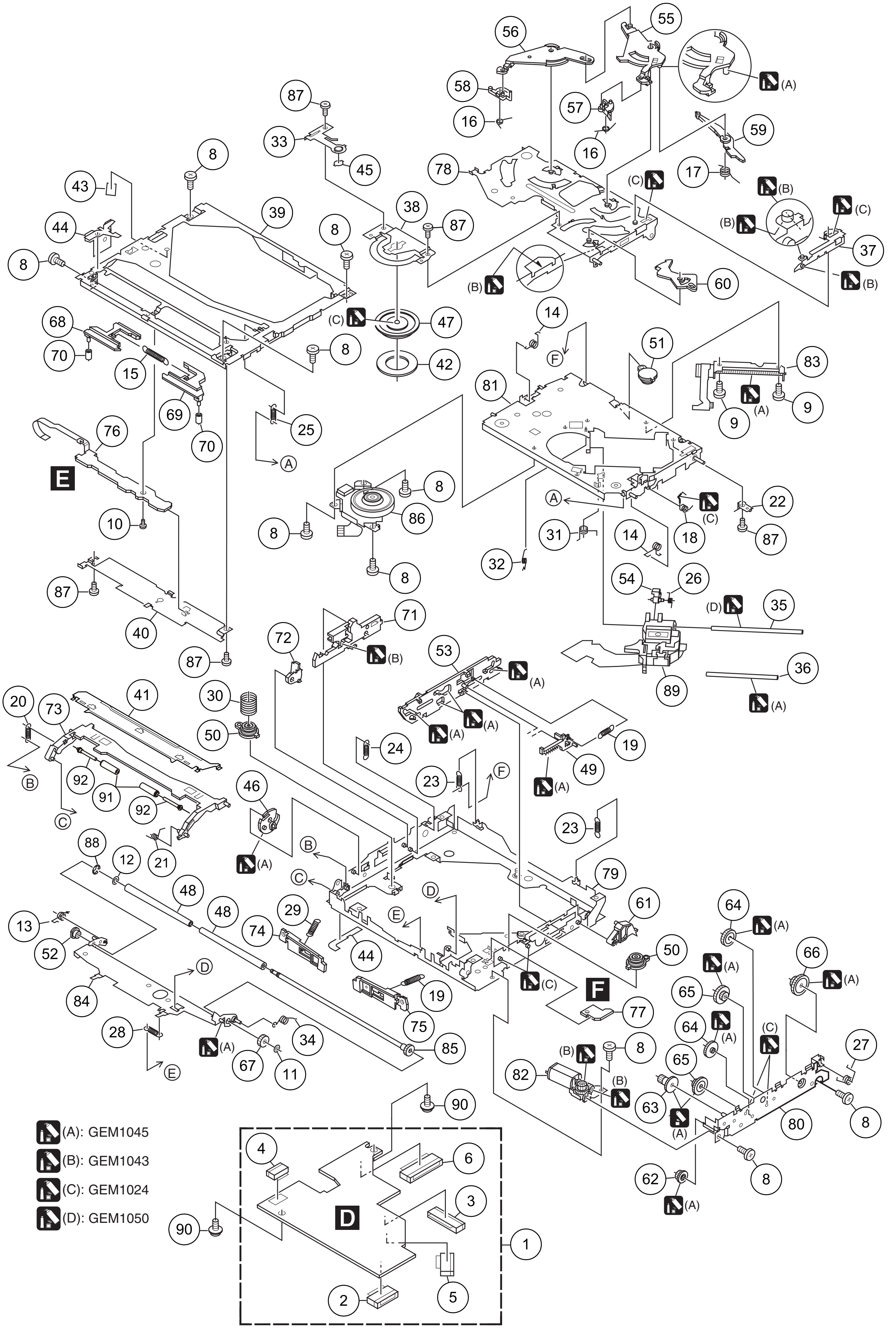
Mark	No.	Description	Part No.
	1	Screw	BSZ26P050FTC
	2	Chassis	CNA2895
	3	Case	CNB3272
	4	Insulator	CNN1061
	5	Power Supply Unit	CWN2489
	6	Cord Assy	CDE8090
	7	Terminal(CN7552)	CKF-047
	8	Connector(CN7501)	CKM1359
	9	Connector(CN7551)	CKS4674
	10	Holder	CND3221
	11	Remote Control Assy	CXC6273
	12	Cover	CZN7062
	13	Panel	See Contrast table(2)
	14	Screw	BMZ20P030FTB
	15	Screw	CMZ50P060FTC
	16	Holder	CNC9510
	17	Bracket	CND1482
	18	Cord Assy	CDE7321
	19	Cap	CNS1472
	20	Cord Assy	CDE8086
⚠	21	Fuse(7.5 A)	CEK1135
	22	Cap	CNS1472
	23	Cord Assy	CDE8088
⚠	24	Fuse(4 A)	CEK1001
⚠	25	Fuse(10 A)	CEK1136
	26	Resistor	RSV2PMF102J
	27	Resistor	RS1/2PMF102J

(2) CONTRAST TABLE

"AVH-P7950DVD/RC, AVH-P7950DVD/RD, AVH-P7950DVD/RI and AVH-P7950DVD/CN5 are constructed the same except for the following:"

Mark	No.	Description	RC	RD	RI	CN5
	13	Panel	CNS8691	CNS8689	CNS8689	CNS8689

9.7 DVD MECHANISM MODULE


56
55
(A)
58
57
87
16
16
59
33
45
78
17
8
43
(C)
(B)
(B)
(C)
39
38
44
8
87
37
8
(B)
60
(B)
(C)
47
14
68
8
42
51
83
70
F
15
81
9
(A)
9
69
25
76
70
A
E
8
86
A
22
10
18
(C)
8
31
14
87
32
8
54
26
87
(D)
35
71
40
72
(B)
53
87
(A)
36
89
(A)
20
41
30
73
50
(A)
(A)
24
19
B
92
23
F
49
(A)
91
92
46
23
C
21
88
12
B
79
(A)
C
D
48
61
29
64
(A)
13
48
74
E
66
52
44
50
(A)
(A)
D
(C)
F
84
19
65
77
75
64
(A)
(C)
28
34
27
(A)
85
8
67
11
E
(B)
65
82
(B)
63
90
(A)
80
8
4
6
3
D
8
62
(A)
90
1
2
5

(A): GEM1045

(B): GEM1043

(C): GEM1024

(D): GEM1050

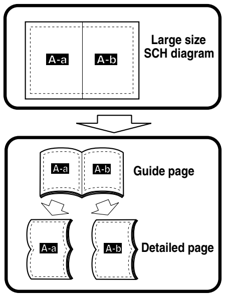
DVD MECHANISM MODULE SECTION PARTS LIST

Mark	No.	Description	Part No.
	1	DVD Core Unit	YWX5004
	2	Connector(CN1851)	CKS5045
	3	Connector(CN1101)	CKS4841
	4	Connector(CN1301)	CKS5017
	5	Connector(CN1201)	CKS5043
	6	Connector(CN1901)	CKS5054
	7	•••••	
	8	Screw	BMZ20P020FTC
	9	Screw	BMZ20P025FNI
	10	Screw	CBA1787
	11	Washer	CBF1038
	12	Washer	CBF1064
	13	Spring	CBH2586
	14	Spring	CBH2588
	15	Spring	CBH2589
	16	Spring	CBH2590
	17	Spring	CBH2591
	18	Spring	CBH2592
	19	Spring	CBH2593
	20	Spring	CBH2596
	21	Spring	CBH2597
	22	Spring	CBL1726
	23	Spring	CBH2599
	24	Spring	CBH2600
	25	Spring	CBH2601
	26	Spring	CBH2926
	27	Spring	CBH2604
	28	Spring	CBH2605
	29	Spring	CBH2710
	30	Spring	CBH2711
	31	Spring	CBH2935
	32	Spring	CBH2890
	33	Spring	CBL1689
	34	Spring	CBH2898
	35	Shaft	CLA4206
	36	Shaft	CLA4701
	37	Lever	CNC9933
	38	Holder	CND2643
	39	Frame	CND2250
	40	Holder	CND2251
	41	Holder	CND3936
	42	Sheet	CNM6883
	43	Sheet	CNM8697
	44	Sheet	CNM9658
	45	Sheet	CNM9407
	46	Cam	CNV7156
	47	Clamper	CNV7158
	48	Roller	CNV7165
	49	Rack	CNV7175
	50	Damper	CNV9061
	51	Damper	CNV9062
	52	Collar	CNV8845
	53	Lever	CNV8865
	54	Rack	CNV9063
	55	Arm	CNV8867
	56	Arm	CNV8868
	57	Arm	CNV9577
	58	Arm	CNV8870
	59	Arm	CNV8871
	60	Arm	CNV8872
	61	Arm	CNV8873
	62	Gear	CNV8874
	63	Gear	CNV8875
	64	Gear	CNV8876
	65	Gear	CNV8877
	66	Gear	CNV8878
	67	Gear	CNV8879
	68	Lever	CNV8903
	69	Lever	CNV8904
	70	Roller	CNV8905
	71	Lever	CNV8908
	72	Arm	CNV8909
	73	Guide	CNV9569
	74	Arm	CNV9116
	75	Arm	CNV9117
	76	Compound Unit(A)	CWX3154
	77	Compound Unit(B)	CWX3394
*	78	Arm Unit	CXC7872
	79	Frame Unit	CXC6442
	80	Bracket Unit	CXB8685
	81	Chassis Unit	CXC6443
	82	Motor Unit(LOAD)(M1)	CXC4912
	83	Motor(STEPPING)(M2)	CXM1364
	84	Arm Unit	CXC5486
	85	Roller Unit	CXC5708
	86	Motor(SPDL)(M3)	CXM1362
	87	Screw	JFZ20P018FTC
	88	Washer	YE20FTC
	89	Pickup Unit(Service)	CXX2118
	90	Screw	IMS20P030FTC
	91	Collar	CNV9570
	92	Shaft	CLA4771

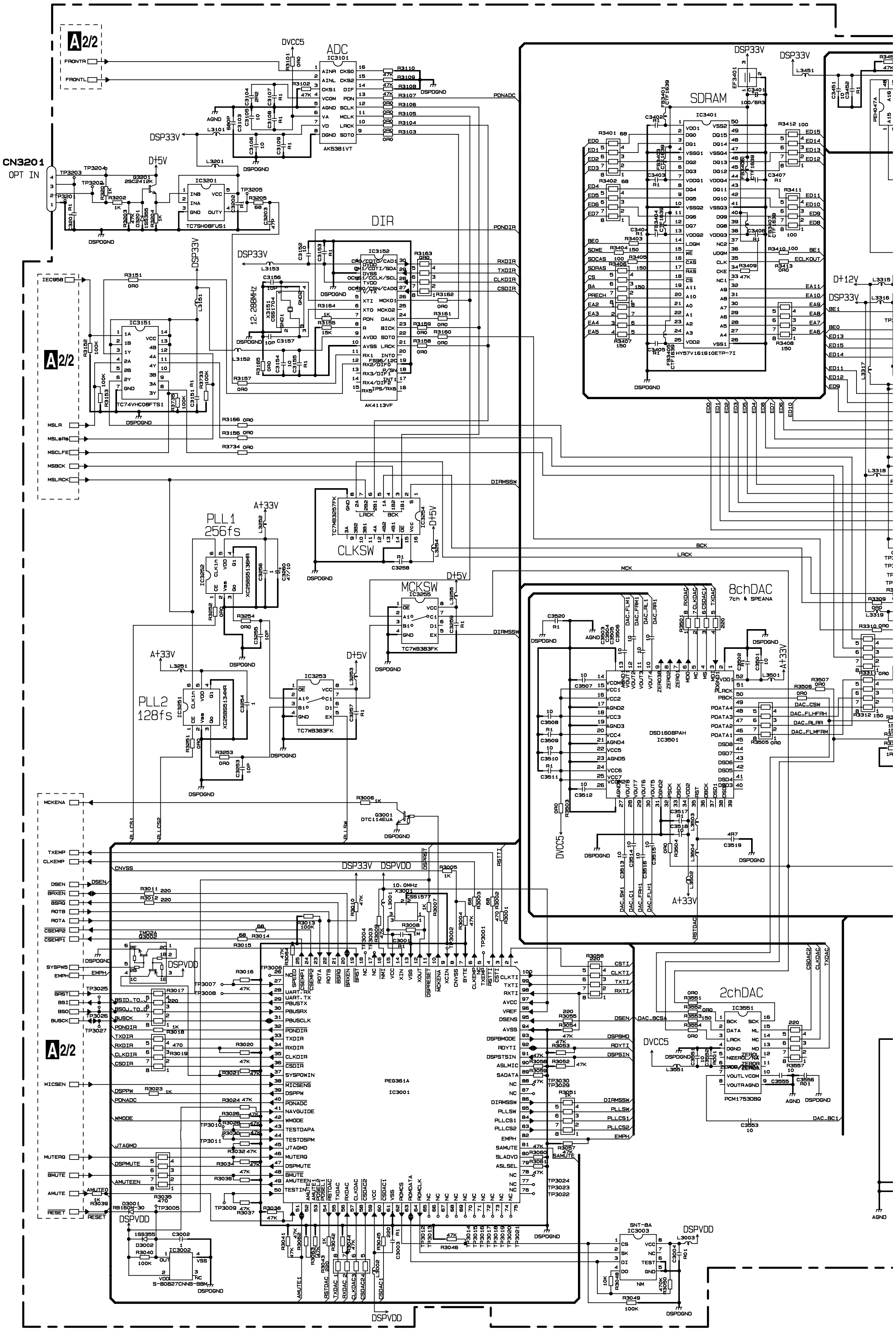
10. SCHEMATIC DIAGRAM

10.1 DVD MOTHER UNIT(SYSTEM)(GUIDE PAGE)

Note: When ordering service parts, be sure to refer to " EXPLODED VIEWS AND PARTS LIST" or "ELECTRICAL PARTS LIST".


A-a
A-b
Large size SCH diagram
A-a
A-b
Guide page
A-a
A-b
Detailed page

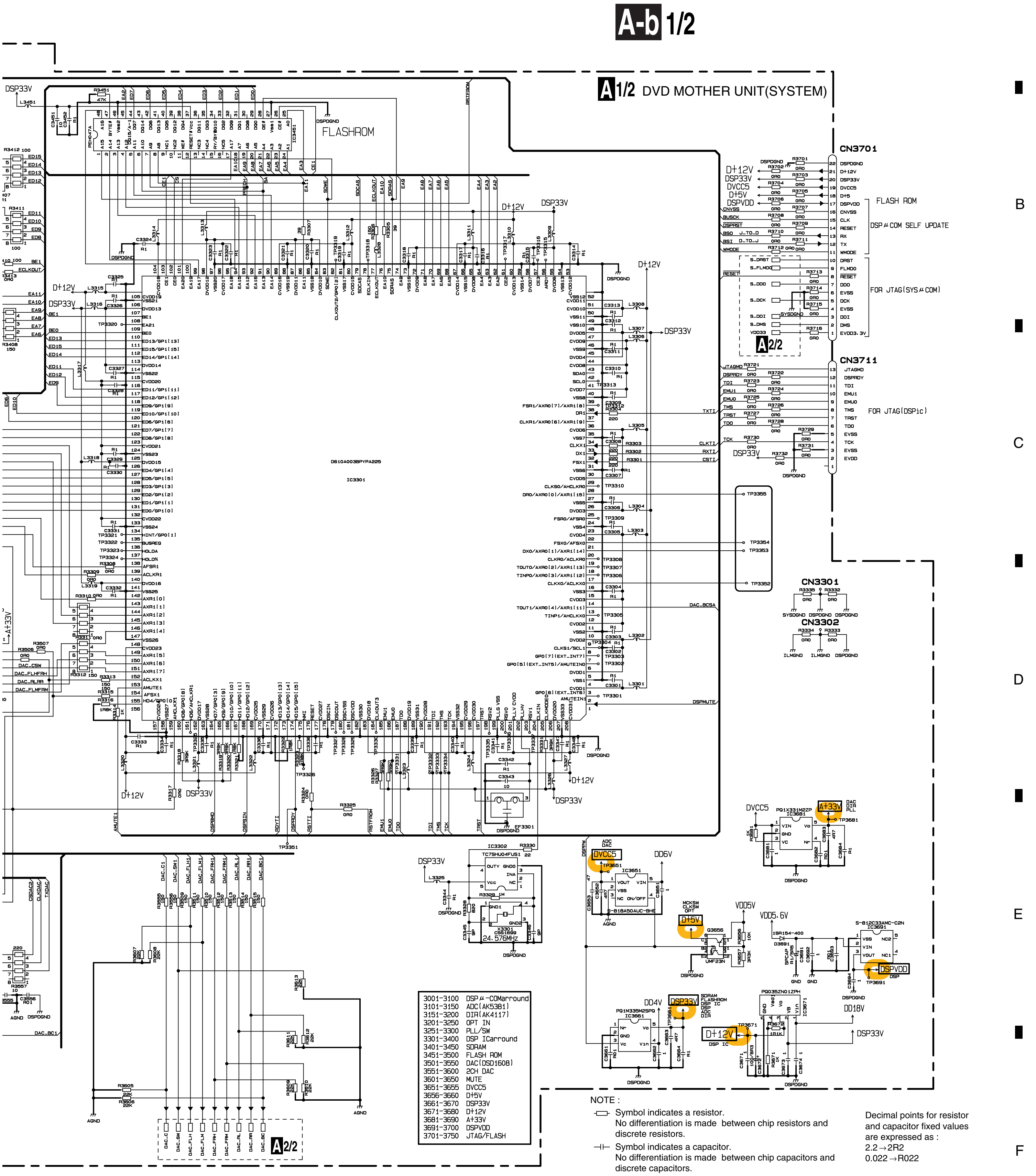
A-a 1/2


A 2/2
FRONTR
FRONTL
DVCC5
ADC
IC3101
AK5381VT
DSP33V
CN3201
OPT IN
IC3201
TC7SH08FUS1
D+5V
DIR
IC3152
AK4113VF
12.288MHz
IEC958
IC3151
TC74VHC08FTS1
A 2/2
MSLR
MSLsRs
MSCLFE
MSBCK
MSLRCK
SDRAM
IC3401
HY57V161610ETP-7I
D+12V
PLL1
256fs
IC3252
A+33V
CLKSW
TC7W3257FK
MCKSW
IC3255
TC7WB383FK
PLL2
128fs
IC3251
IC3253
TC7WB383FK
8chDAC
7ch & SPEANA
DSD1608PAH
IC3501
DVCC5
MCKENA
Q3001
DTC114EUA
TXEMP
CLKEMP
DSEN
BRXEN
BSRQ
ROTB
ROTA
CSEMP2
CSEMP1
Q3002
IMD2A
SYSPWS
EMPH
BRST
BSI
BSO
BUSCK
A 2/2
MICSEN
MUTERQ
BMUTE
AMUTE
RESET
DSPVDD
10.0MHz
X3001
PEG361A
IC3001
2chDAC
IC3551
PCM1753DBQ
D3001
RB160M-30
IC3002
S-80827CNNB-B8H
SNT-BA
IC3003
DSPDGND
AGND
DSPVDD

A 1/2

A-b 1/2

A 1/2 DVD MOTHER UNIT(SYSTEM)


FLASHROM
IC3451
IC3301
D610A003BPYPA225
CN3701
FLASH ROM
DSPμCOM SELF UPDATE
FOR JTAG(SYSμCOM)
CN3711
FOR JTAG(DSPic)
CN3301
CN3302
A 2/2
DSP33V
D+12V
DVCC5
D+5V
DSPVDD
IC3302
TC7SHU04FUS1
X3301
24.576MHz
IC3651
S-818A50AUC-BHE
IC3681
PQ1X331M2ZP
A+33V
IC3691
S-812C33AMC-C2N
IC3661
PQ1N335M2SPQ
IC3671
PQ035ZN01ZPH
DD4V
DD6V
DD18V
VDD5V
VDD5.6V
Q3656
UMF23N
D3691
1SR154-400
DSPDGND
AGND
A 2/2

3001-3100	DSPμ-COMarround
3101-3150	ADC(AK5381)
3151-3200	DIR(AK4117)
3201-3250	OPT IN
3251-3300	PLL/SW
3301-3400	DSP ICarround
3401-3450	SDRAM
3451-3500	FLASH ROM
3501-3550	DAC(DSD1608)
3551-3600	2CH DAC
3601-3650	MUTE
3651-3655	DVCC5
3656-3660	D+5V
3661-3670	DSP33V
3671-3680	D+12V
3681-3690	A+33V
3691-3700	DSPVDD
3701-3750	JTAG/FLASH

NOTE :

▭ Symbol indicates a resistor.
No differentiation is made between chip resistors and discrete resistors.

⊣⊢ Symbol indicates a capacitor.
No differentiation is made between chip capacitors and discrete capacitors.

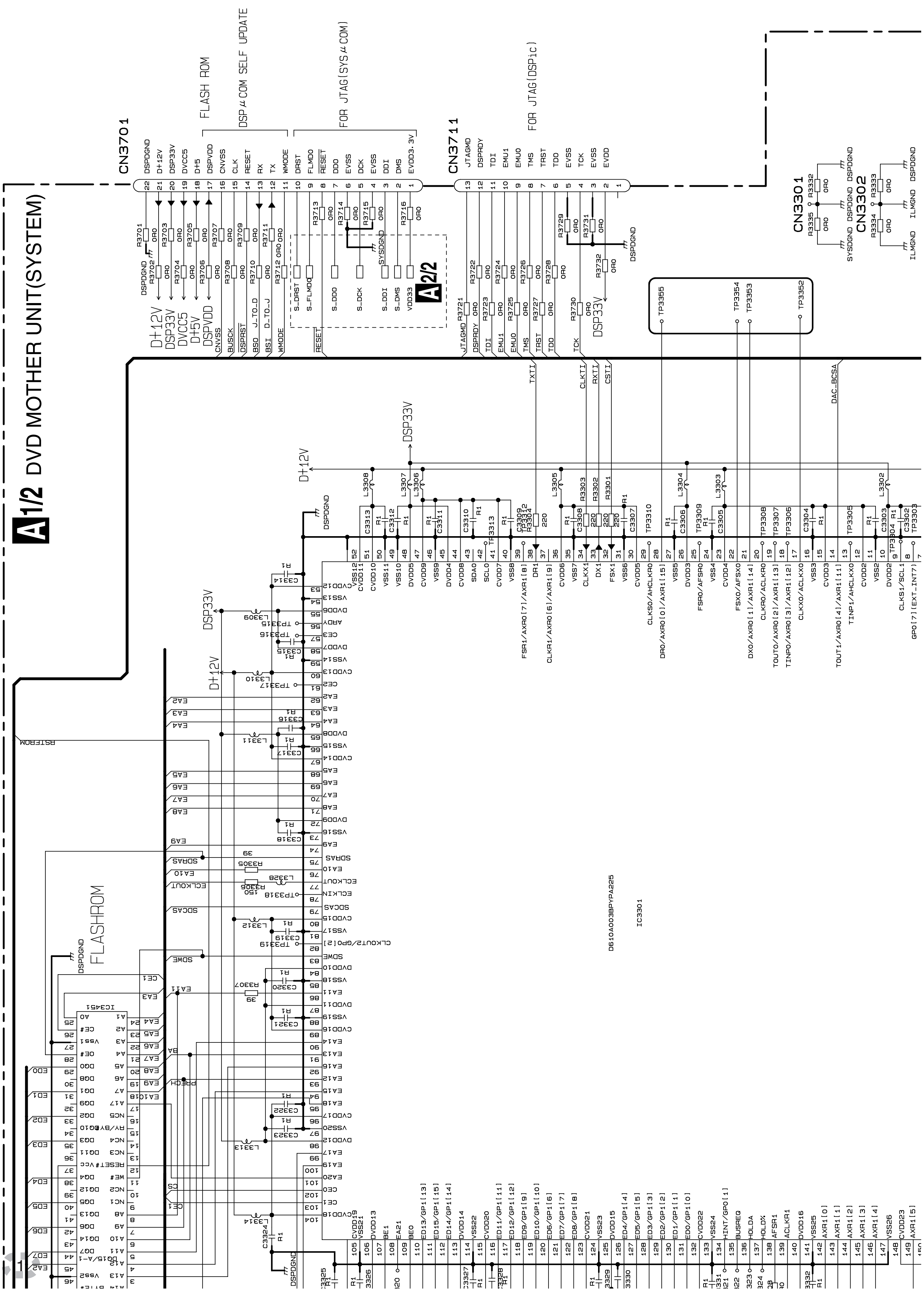
Decimal points for resistor and capacitor fixed values are expressed as :
2.2→2R2
0.022→R022

⬭ : The power supply is shown with the marked box.

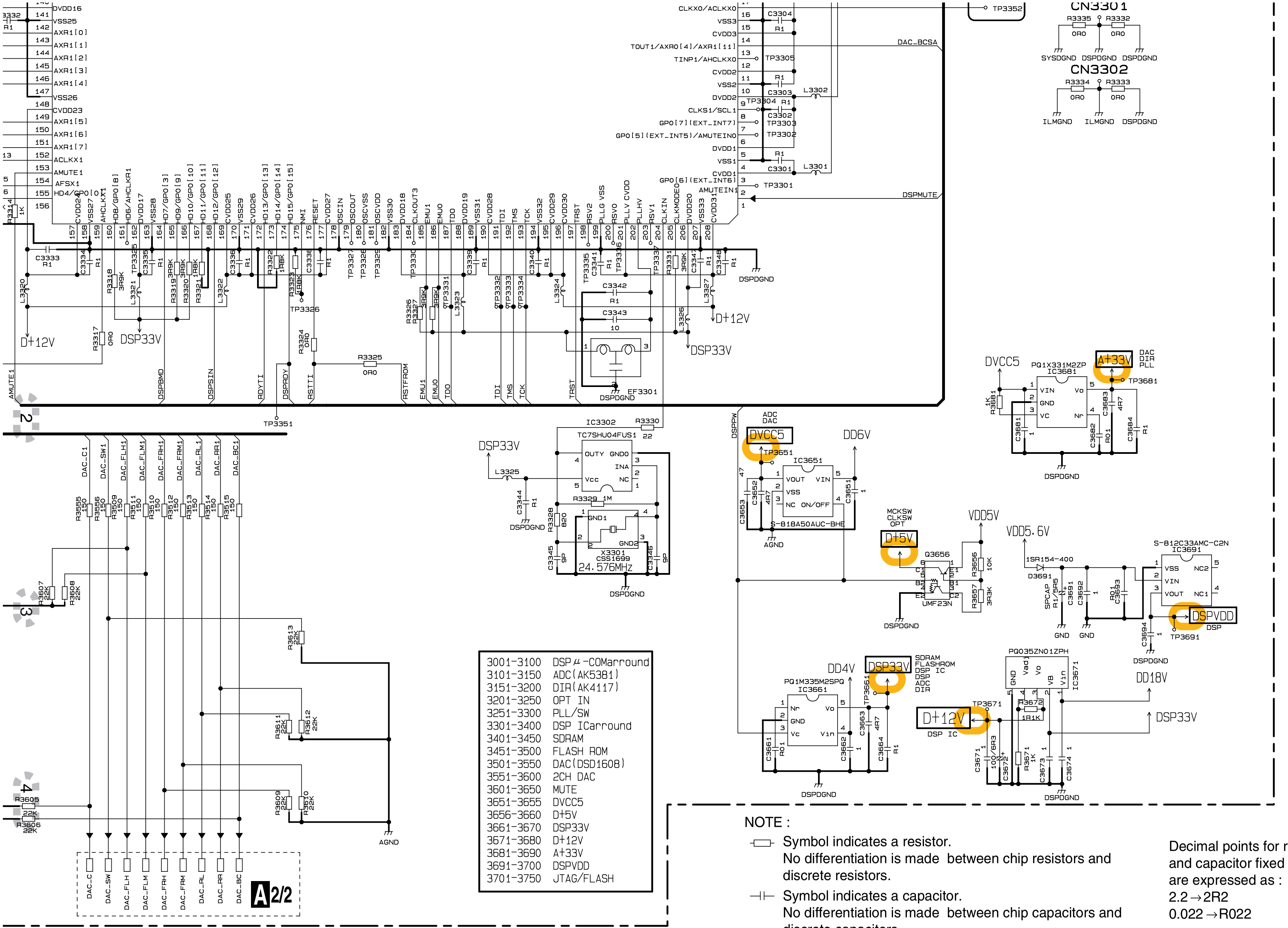
The ⚠ mark found on component parts indicates the importance of the safety factor of the part.
Therefore, when replacing, be sure to use parts of identical designation.

A 1/2

A-a A-b


A 1/2 DVD MOTHER UNIT(SYSTEM)
A 2/2
CN3701
CN3711
CN3301
CN3302
FLASH ROM
DSPμCOM SELF UPDATE
FOR JTAG(SYSμCOM)
FOR JTAG(DSPic)
DSPDGND
D+12V
DSP33V
DVCC5
D+5V
DSPVDD
CNVSS
BUSCK
DSPRST
BSO
BSI
WMODE
RESET
JTAGMD
DSPRDY
TDI
EMU1
EMU0
TMS
TRST
TDO
TCK
TXTI
CLKTI
RXTI
CSTI
DAC_BCSA
SYSDGND
ILMGND
TP3355
TP3354
TP3353
TP3352
IC3301
D610A003BPYPA225
FLASHROM
IC3451
RSTROM
SDRAS
SDCAS
SDWE
ECLKOUT
CE1
CE3
CS

A-b 1/2


CN3301
R3335 0R0
R3332 0R0
SYSDGND
DSPDGND
CN3302
R3334 0R0
R3333 0R0
ILMGND
TP3352
DAC_BCSA
DSPMUTE
DSPDGND
D+12V
DSP33V
EF3301
IC3302
TC7SHU04FUS1
R3330 22
X3301
CSS1699
24.576MHz
DSPDGND
DSPPW
ADC
DAC
DVCC5
TP3651
IC3651
S-818A50AUC-BHE
AGND
DD6V
MCKSW
CLKSW
OPT
D+5V
Q3656
UMF23N
VDD5V
VDD5.6V
1SR154-400
D3691
S-812C33AMC-C2N
IC3691
DSPVDD
DSP
TP3691
DVCC5
PQ1X331M2ZP
IC3681
A+33V
DAC
DIR
PLL
TP3681
PQ1M335M2SPQ
IC3661
DD4V
DSP33V
SDRAM
FLASHROM
DSP IC
DSP
ADC
DIR
TP3661
PQ035ZN01ZPH
IC3671
DD18V
D+12V
DSP IC
TP3671
DSP33V
DAC_C1
DAC_SW1
DAC_FLH1
DAC_FLM1
DAC_FRH1
DAC_FRM1
DAC_RL1
DAC_RR1
DAC_BC1
DAC_C
DAC_SW
DAC_FLH
DAC_FLM
DAC_FRH
DAC_FRM
DAC_RL
DAC_RR
DAC_BC
A 2/2
AGND
TP3351
AMUTE1

3001-3100	DSP μ-COMarround
3101-3150	ADC(AK5381)
3151-3200	DIR(AK4117)
3201-3250	OPT IN
3251-3300	PLL/SW
3301-3400	DSP ICarround
3401-3450	SDRAM
3451-3500	FLASH ROM
3501-3550	DAC(DSD1608)
3551-3600	2CH DAC
3601-3650	MUTE
3651-3655	DVCC5
3656-3660	D+5V
3661-3670	DSP33V
3671-3680	D+12V
3681-3690	A+33V
3691-3700	DSPVDD
3701-3750	JTAG/FLASH

NOTE :

—▭— Symbol indicates a resistor.
No differentiation is made between chip resistors and discrete resistors.

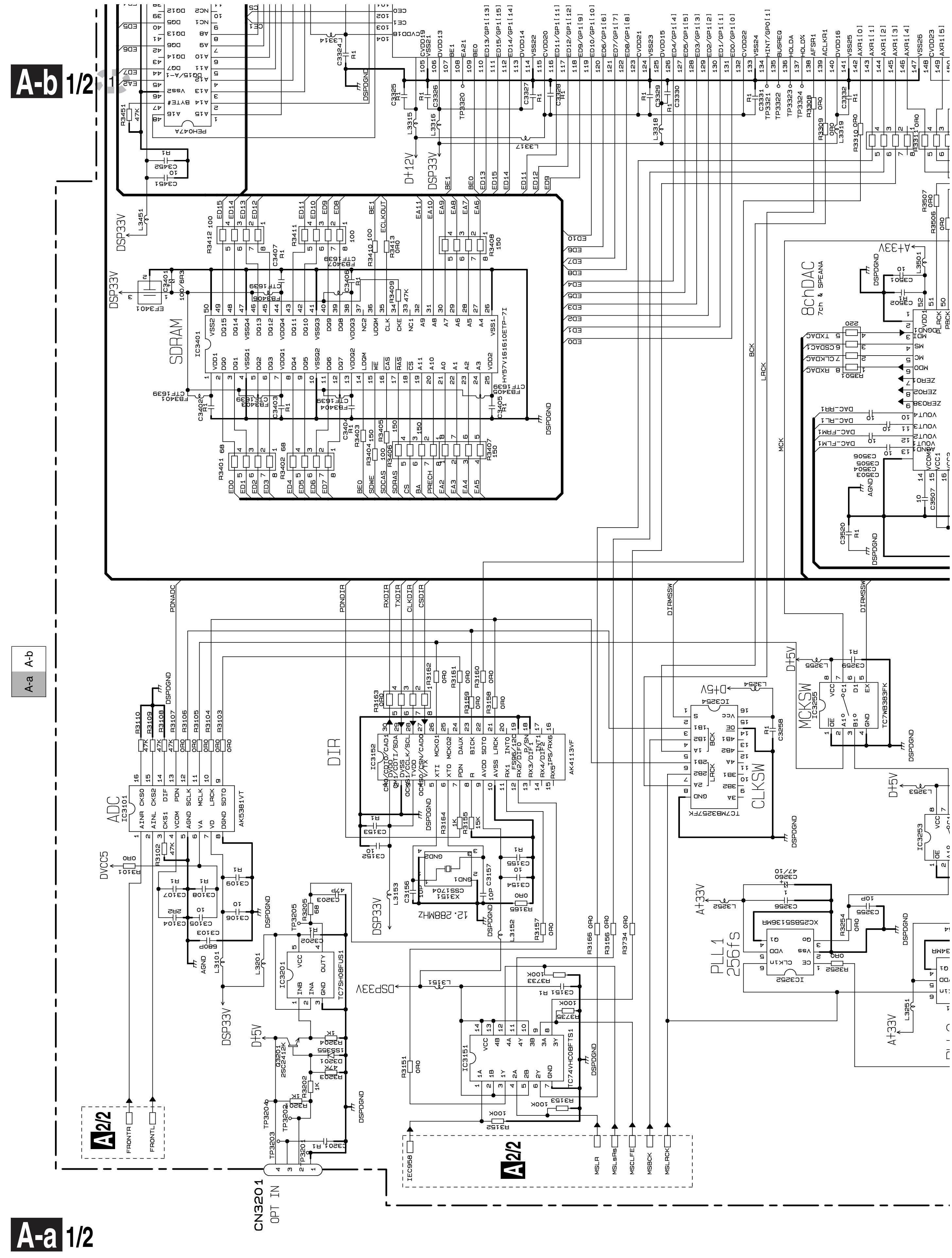
—||— Symbol indicates a capacitor.
No differentiation is made between chip capacitors and discrete capacitors.

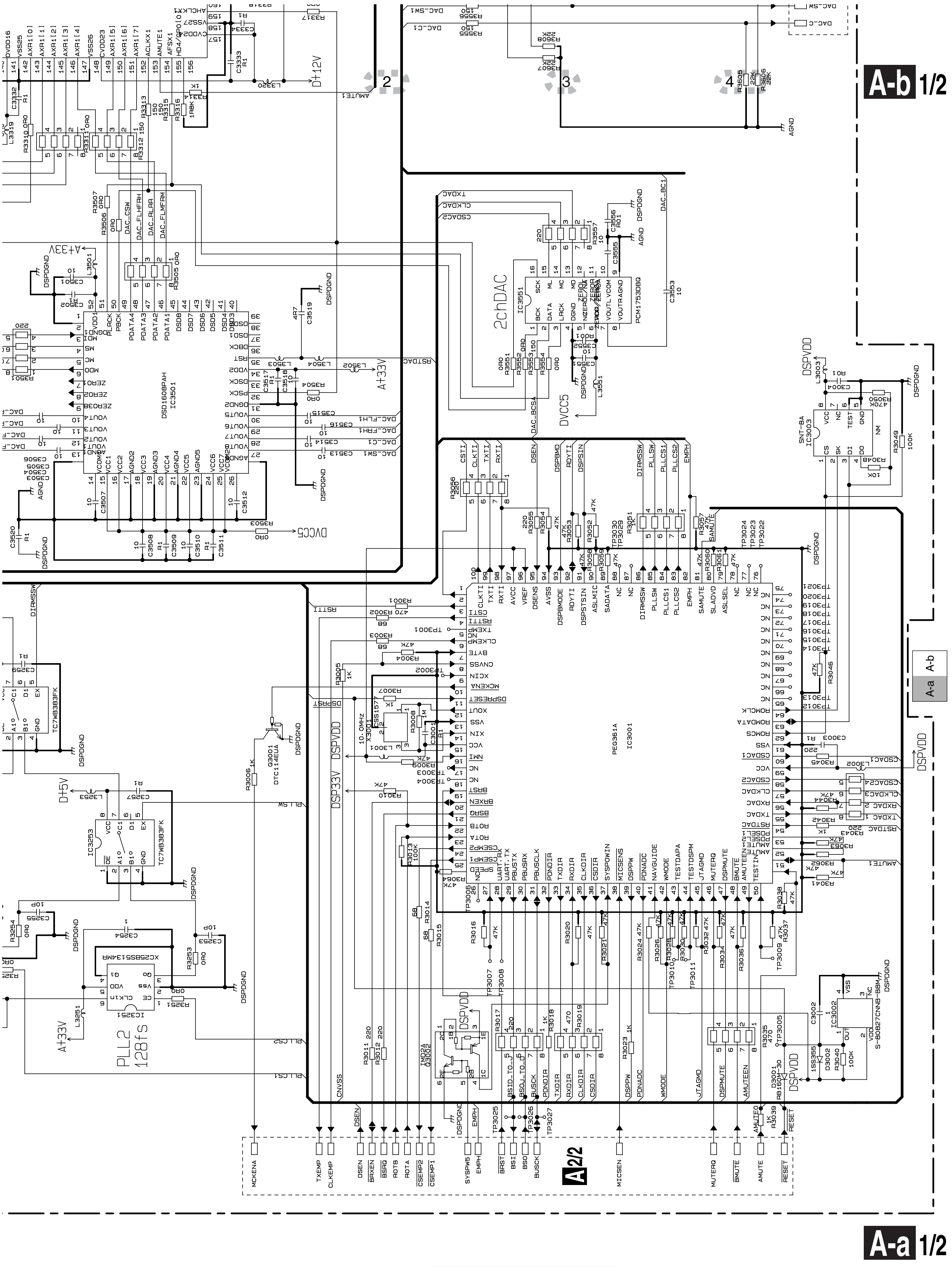
Decimal points for resistor and capacitor fixed values are expressed as :
2.2 → 2R2
0.022 → R022

The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.

▭ : The power supply is shown with the marked box.

A-a	A-b


A-b 1/2
A-a 1/2
A-a
A-b
SDRAM
IC3401
HY57V161610ETP-7I
EF3401
DSP33V
D+12V
DIR
IC3152
AK4113VF
ADC
IC3101
AK5381VT
CLKSW
IC3254
TC7MB3257FK
MCKSW
IC3255
TC7WB383FK
PLL1
256fs
IC3252
XC25BS5136MR
IC3201
TC7SH08FUS1
IC3151
TC74VHC08FTS1
X3151
CSS1704
12.288MHz
Q3201
2SC2412K
8chDAC
7ch & SPEANA
CN3201
OPT IN
A2/2
FRONTR
FRONTL
IEC958
MSLR
MSLsRs
MSLCFE
MSBCK
MSLRCK
D+5V
A+33V
DVCC5
DSPDGND
AGND
PDNADC
PDNDIR
RXDIR
TXDIR
CLKDIR
CSDIR
DIRMSSW
BCK
LRCK
MCK
PEH047A


A-b 1/2
A-a 1/2
A-a
A-b
A2/2
2chDAC
IC3551
PCM1753DBQ
DSD1608PAH
IC3501
PEG361A
IC3001
TC7WB3B3FK
IC3253
PLL2
128fs
IC3251
XC25BS5134MR
SNT-8A
IC3003
S-80827CNNB-B8M
IC3002
DTC114EUA
Q3001
IMD2A
Q3002
1SS355
D3002
RB160M-30
D3001
10.0MHz
X3001
CSS1577
D+12V
A+33V
D+5V
DVCC5
DSPVDD
DSP33V
DSPGND
DSPDGND
AGND
AMUTE1
DAC_SW
DAC_C
DAC_SW1
DAC_C1
DAC_FLH1
DAC_FRH1
TXDAC
CLKDAC
CSDAC2
CSDAC1
CSDAC3
CSDAC4
CLKDAC3
RXDAC 2
TXDAC 1
RSTDAC
DAC_BC1
DAC_BCSA
DIRMSSW
PLLSW
PLLCS1
PLLCS2
MCKENA
TXEMP
CLKEMP
DSEN
BRXEN
BSRQ
ROTB
ROTA
CSEMP2
CSEMP1
SYSPW5
EMPH
BRST
BSI
BSO
BUSCK
MICSEN
MUTERQ
BMUTE
AMUTE
RESET
CNVSS
PDNDIR
TXDIR
CLKDIR
CSDIR
DSPPW
PDNADC
WMODE
JTAGMD
DSPMUTE
AMUTEEN
BSID_TO_J
BSOJ_TO_B
TP3025
TP3026
TP3027
TP3005
TP3007
TP3008
TP3009
TP3010
TP3011

10.2 DVD MOTHER UNIT(DSP)(GUIDE PAGE)

A

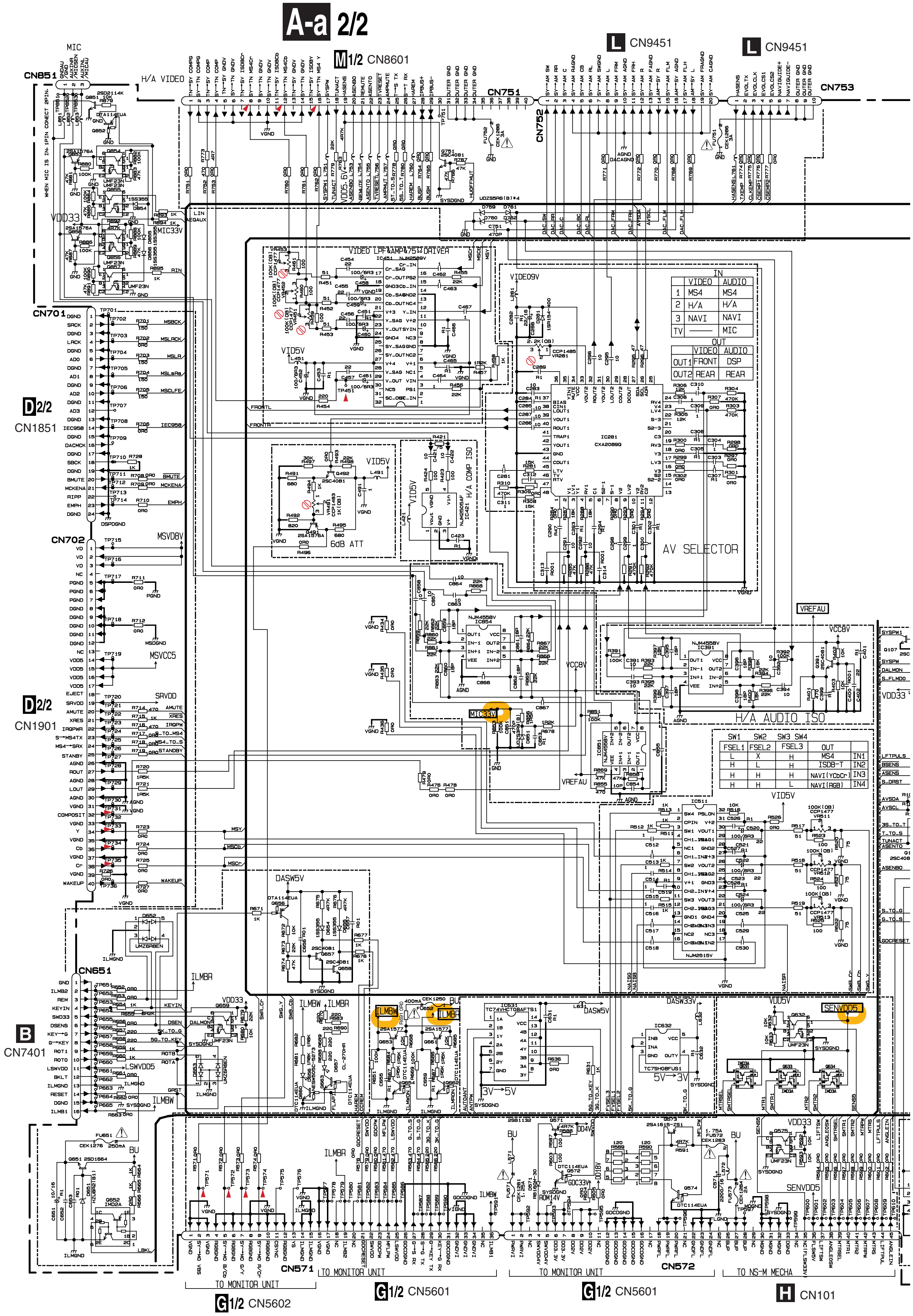
B

C

D

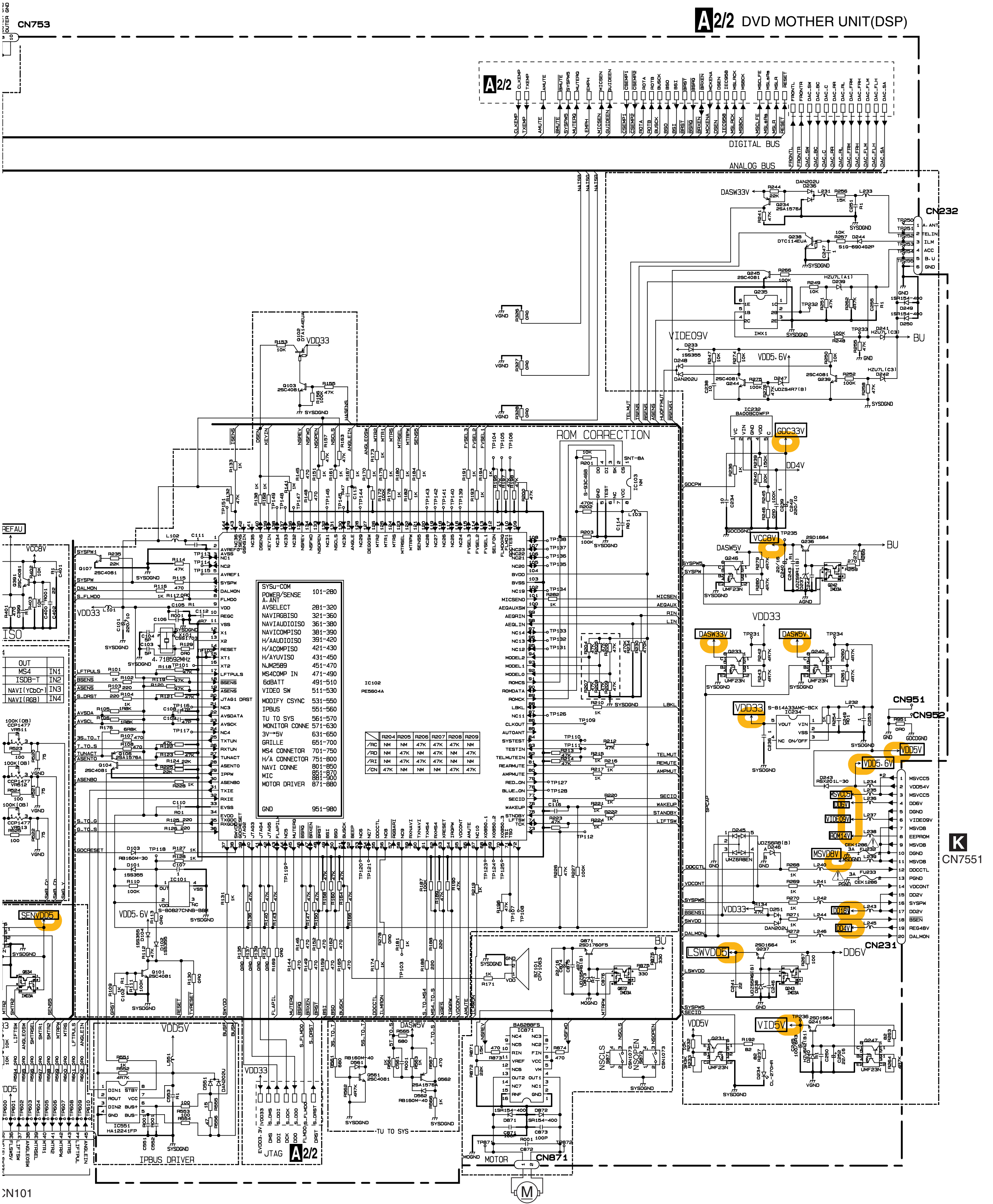
E

F


A-a 2/2
M 1/2 CN8601
L CN9451
L CN9451
CN851
MIC
H/A VIDEO
CN751
CN752
CN753
WHEN MIC IS IN-1PIN CONECT 2PIN.
CN701
D 2/2 CN1851
CN702
D 2/2 CN1901
VIDEO LPF&AMP&75Ω DRIVER
IC451 NJM2599V
VIDEO9V
IN VIDEO AUDIO
1 MS4 MS4
2 H/A H/A
3 NAVI NAVI
TV —— MIC
OUT VIDEO AUDIO
OUT1 FRONT DSP
OUT2 REAR REAR
IC281 CXA2089Q
AV SELECTOR
H/A COMP ISO
6dB ATT
VREFAU
VCC8V
H/A AUDIO ISO
NJM4558V IC391
NJM4558V IC854
SW1 SW2 SW3 SW4
FSEL1 FSEL2 FSEL3 OUT
L X H MS4 IN1
H L H ISDB-T IN2
H H H NAVI(YCbCr) IN3
H H L NAVI(RGB) IN4
IC511 NJM2515V
VID5V
DASW5V
CN651
B CN7401
IC631 TC74VHCT08AFT
IC632 TC7SH08FU
3V→5V
5V→3V
SENVDD5
CN571
CN572
TO MONITOR UNIT
TO MONITOR UNIT
TO MONITOR UNIT
TO NS-M MECHA
G 1/2 CN5602
G 1/2 CN5601
G 1/2 CN5601
H CN101

A 2/2

A-b 2/2


A 2/2 DVD MOTHER UNIT(DSP)
CN753
DIGITAL BUS
ANALOG BUS
CN232
ROM CORRECTION
IC102
PE5604A
IC103
IC232
BA00BC0WFP
IC234
S-814A33AMC-BCX
IC101
S-80827CNNB-B8H
IC551
HA12241FP
IPBUS DRIVER
IC871
BA6208FS
MOTOR
CN871
CN951
CN952
CN231
K
CN7551
JTAG A2/2
TU TO SYS
CN101
VDD33
VDD5V
VDD5.6V
VIDEO9V
VCC8V
DD4V
DD6V
GDC33V
DASW33V
DASW5V
VDD5.6V
VDD5V
SENVDD5
LSWVDD5
VID5V
MSVCC5
DD6V
VIDEO9V
ROM14V
MSVDD8V
DD1.8V
DD4V
BU
X101
4.718592MHz

	R204	R205	R206	R207	R208	R209
/RC	NM	NM	47K	47K	47K	NM
/RD	NM	47K	NM	47K	NM	47K
/RI	NM	47K	47K	47K	NM	NM
/CN	47K	NM	NM	NM	47K	47K

SYSu-COM POWER/SENSE A.ANT	101-280
AVSELECT	281-320
NAVIRGBISO	321-360
NAVIAUDIOISO	361-380
NAVICOMPISO	381-390
H/AAUDIOISO	391-420
H/ACOMPISO	421-430
H/AYUVISO	431-450
NJM2589	451-470
MS4COMP IN	471-490
6dBATT	491-510
VIDEO SW	511-530
MODIFY CSYNC	531-550
IPBUS	551-560
TU TO SYS	561-570
MONITOR CONNE	571-630
3V→5V	631-650
GRILLE	651-700
MS4 CONNETOR	701-750
H/A CONNECTOR	751-800
NAVI CONNE	801-850
MIC	851-870 881-900
MOTOR DRIVER	871-880
GND	951-980

A 2/2

A

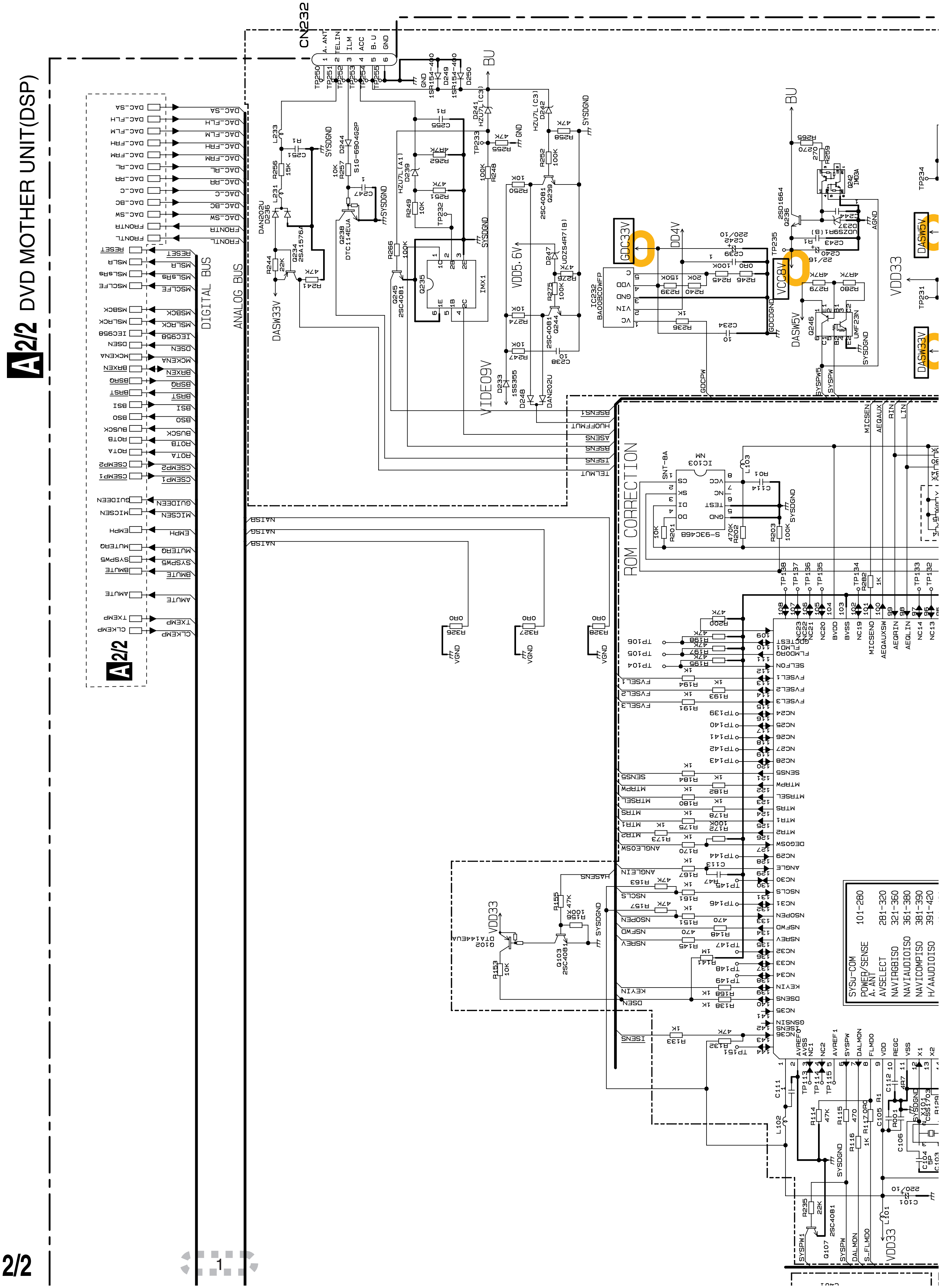
B

C

D

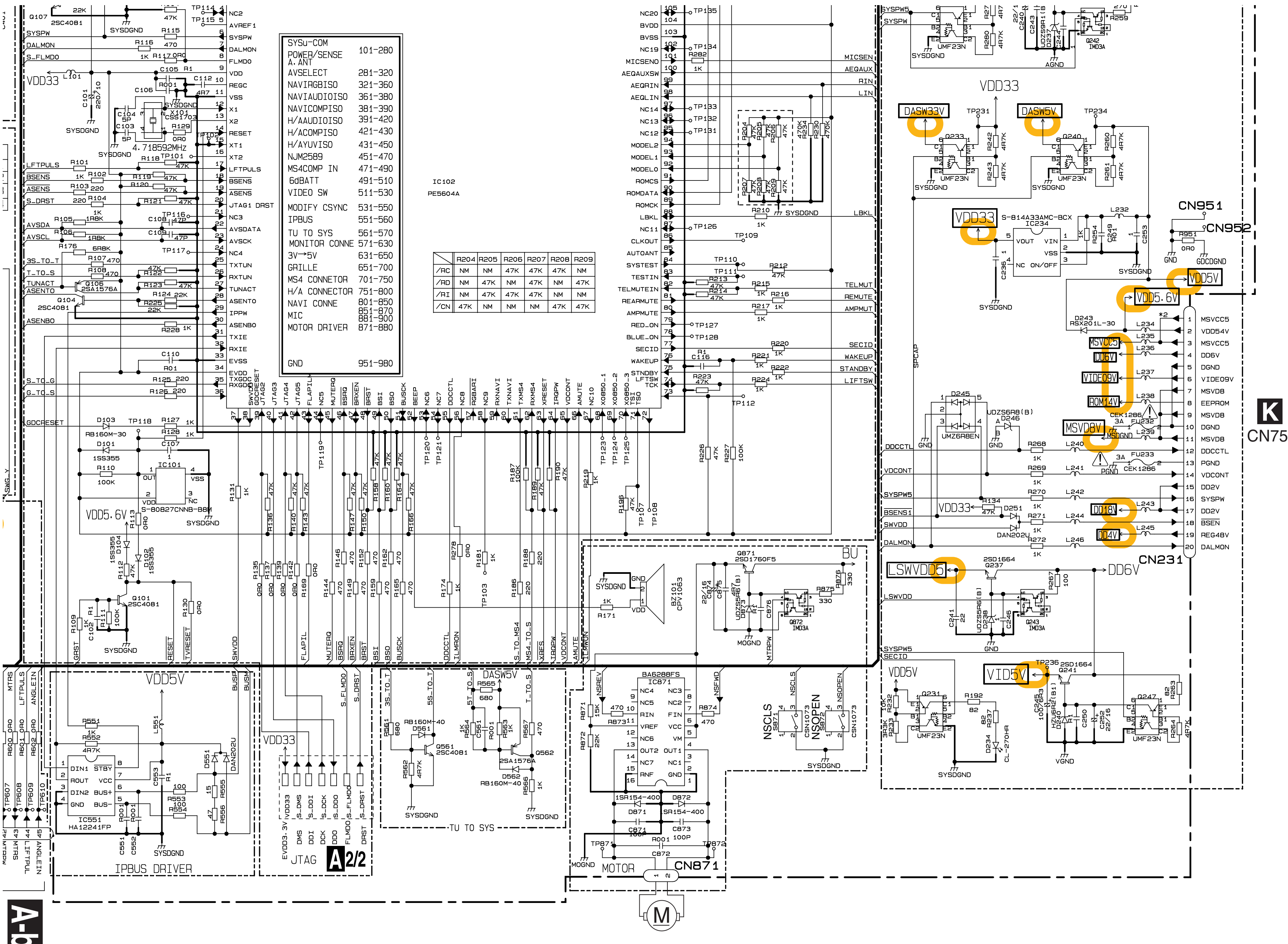
E

F


A 2/2 DVD MOTHER UNIT(DSP)
CN232
A.ANT
TELIN
ILM
ACC
B.U
GND
BU
DIGITAL BUS
ANALOG BUS
DASW33V
VIDEO9V
VDD5.6V
GDC33V
DD4V
VCC8V
DASW5V
VDD33
IC232 BA00BC0WFP
ROM CORRECTION
IC103 NM
S-93C46B
SNT-8A
DAC-SA
DAC-FLH
DAC-FLM
DAC-FRH
DAC-FRM
DAC-FL
DAC-RR
DAC-C
DAC-BC
DAC-SW
FRONTR
FRONTL
RESET
MSLR
MSLSRS
MSCLFE
MSBCK
MSLRCK
IEC958
DSEN
MCKENA
BRXEN
BSRQ
BRST
BSI
BSO
BUSCK
ROTB
ROTA
CSEMP2
CSEMP1
GUIDEEN
MICSEN
EMPH
MUTERQ
SYSPW5
BMUTE
AMUTE
TXEMP
CLKEMP
SYSU-COM 101-280
POWER/SENSE
A.ANT
AVSELECT 281-320
NAVIRGBISO 321-360
NAVIAUDIOISO 361-380
NAVICOMPISO 381-390
H/AAUDIOISO 391-420
A 2/2

A-a A-b

A-b 2/2

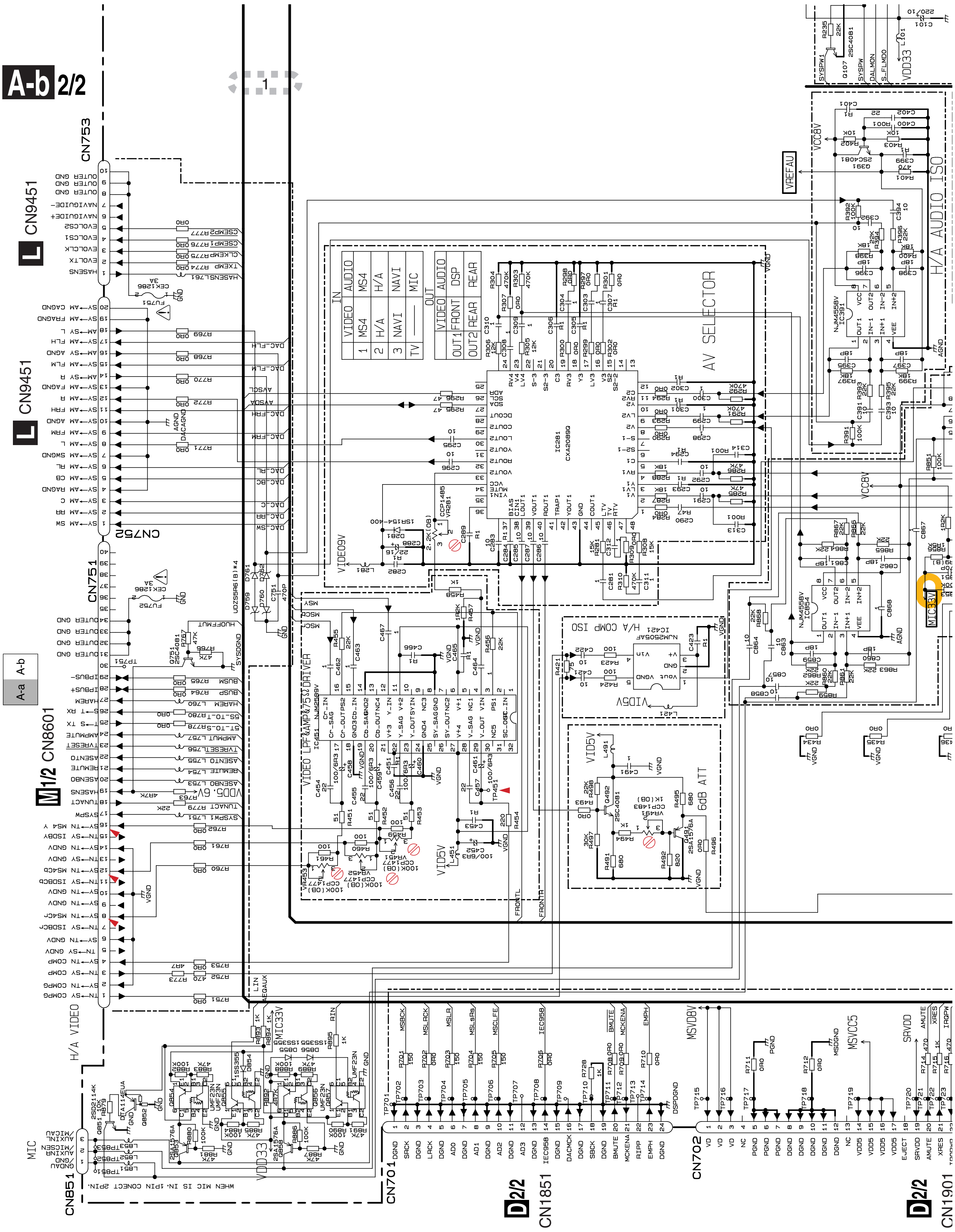

K
CN7551
CN951
CN952
CN231
CN871
IC102
PE5604A
IC101
S-80827CNNB-B8M
IC234
S-814A33AMC-BCX
IC871
BA6288FS
IC551
HA12241FP
VDD33
VDD5V
VDD5.6V
DASW33V
DASW5V
LSWVDD5
VID5V
MSVCC5
DD6V
VIDEO9V
ROM14V
MSVD8V
DD18V
DD4V
DD6V
BU
BZ101
CPV1063
NSCLS
NSOPEN
MOTOR
M
IPBUS DRIVER
JTAG
A2/2
TU TO SYS
4.718592MHz
1 MSVCC5
2 VDD54V
3 MSVCC5
4 DD6V
5 DGND
6 VIDEO9V
7 MSVD8
8 EEPROM
9 MSVD8
10 DGND
11 MSVD8
12 DDCCTL
13 PGND
14 VDCONT
15 DD2V
16 SYSPW
17 DD2V
18 BSEN
19 REG4BV
20 DALMON
A-a
A-b

SYSu-COM POWER/SENSE A.ANT	101-280
AVSELECT	281-320
NAVIRGBISO	321-360
NAVIAUDIOISO	361-380
NAVICOMPISO	381-390
H/AAUDIOISO	391-420
H/ACOMPISO	421-430
H/AYUVISO	431-450
NJM2589	451-470
MS4COMP IN	471-490
6dBATT	491-510
VIDEO SW	511-530
MODIFY CSYNC	531-550
IPBUS	551-560
TU TO SYS	561-570
MONITOR CONNE	571-630
3V→5V	631-650
GRILLE	651-700
MS4 CONNETOR	701-750
H/A CONNECTOR	751-800
NAVI CONNE	801-850
MIC	851-870 881-900
MOTOR DRIVER	871-880
GND	951-980

	R204	R205	R206	R207	R208	R209
/RC	NM	NM	47K	47K	47K	NM
/RD	NM	47K	NM	47K	NM	47K
/RI	NM	47K	47K	47K	NM	NM
/CN	47K	NM	NM	NM	47K	47K

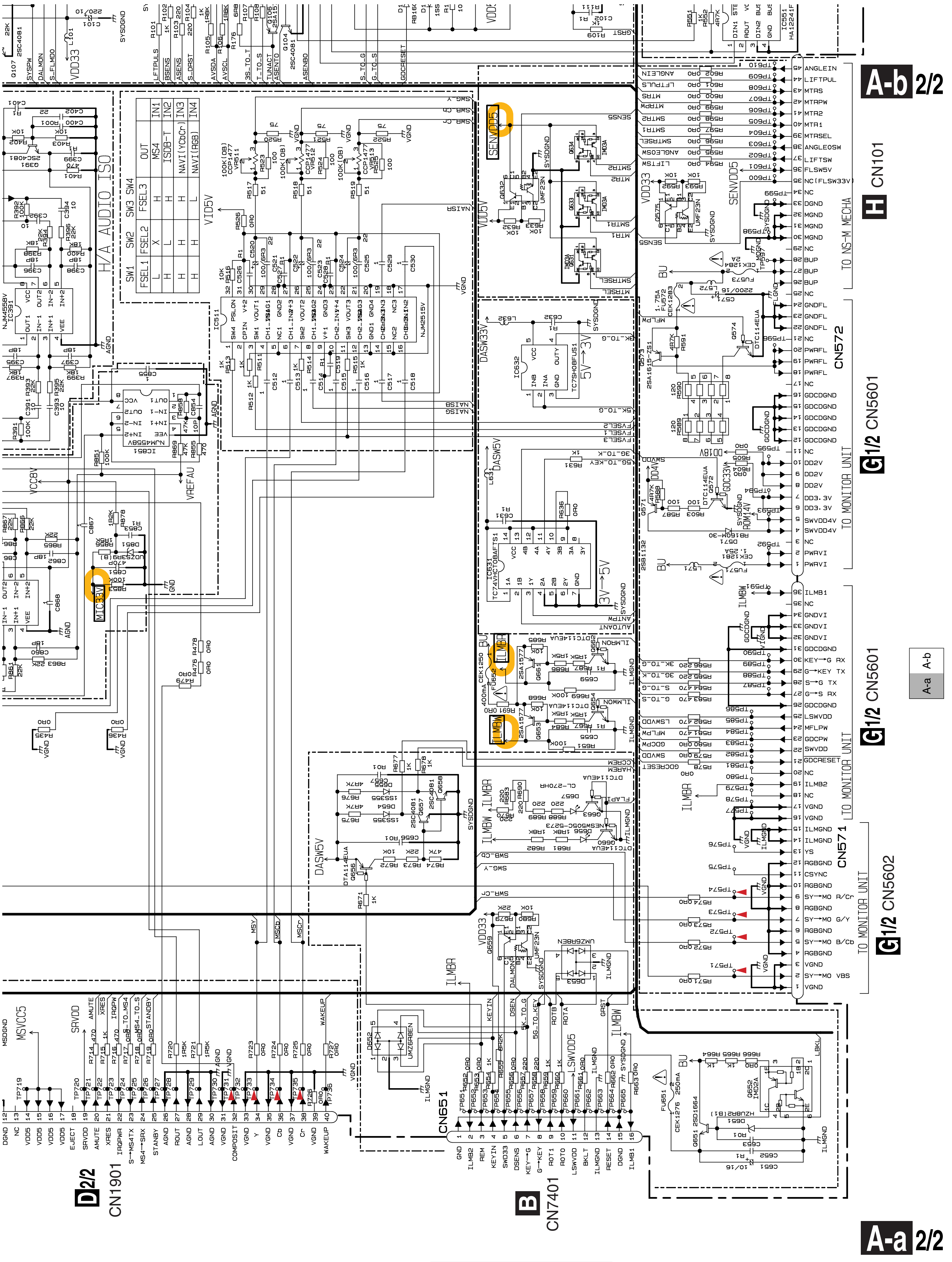
A-b 2/2

A-b 2/2



CN753
CN9451
CN752
CN751
CN8601
M 1/2
L
A-b
A-a
AV SELECTOR
IC281 CXA2089Q
IN
VIDEO AUDIO
1 MS4 MS4
2 H/A H/A
3 NAVI NAVI
TV —— MIC
OUT
VIDEO AUDIO
OUT1 FRONT DSP
OUT2 REAR REAR
VIDEO LPF&AMP&75Ω DRIVER
IC451 NJM2589V
H/A COMP ISO
IC421 NJM2505AF
6dB ATT
H/A AUDIO ISO
IC391 NJM4558V
IC854 NJM4558V
VREFAU
VCC8V
VIDEO9V
VID5V
VIDD5V
VDD5.6V
MIC33V
VDD33
MSVD8V
MSVCC5
SRVDD
FRONTL
FRONTR
H/A VIDEO
MIC
CN851
WHEN MIC IS IN, 1PIN CONECT 2PIN.
CN701
CN702
D 2/2
CN1851
CN1901

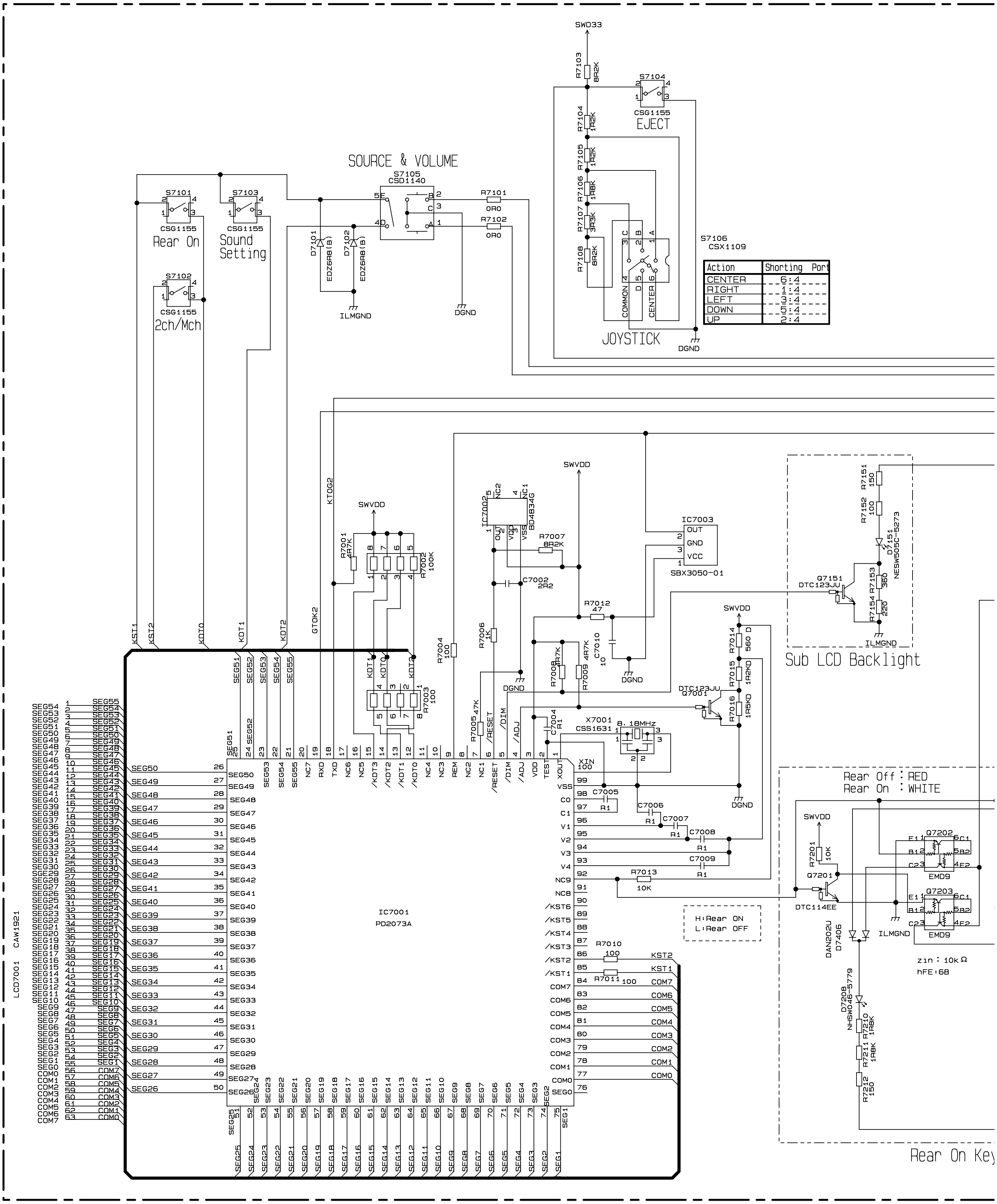
A-a 2/2


A-b 2/2
A-a 2/2
H/A AUDIO ISO
VID5V
IC511
NJM2515V
IC391
NJM4558V
IC851
NJM4558V
VCC8V
VREFAU
MIC33V
IC631
TC74VHCT08AFTS1
IC632
TC7SH08FUS1
5V→3V
3V→5V
DASW33V
DASW5V
SENVDD5
VDD33
VDD5V
ILMBR
ILMBW
H CN101
TO NS-M MECHA
G 1/2 CN5601
CN572
TO MONITOR UNIT
CN571
G 1/2 CN5602
D 2/2 CN1901
B CN7401
CN651
IC551 HA12241F
A
B
C
D
E
F

SW1	SW2	SW3 SW4		
FSEL1	FSEL2	FSEL3	OUT	
L	X	H	MS4	IN1
H	L	H	ISDB-T	IN2
H	H	H	NAVI(YCbCr)	IN3
H	H	L	NAVI(RGB)	IN4

10.3 KEYBOARD UNIT(GUIDE PAGE)

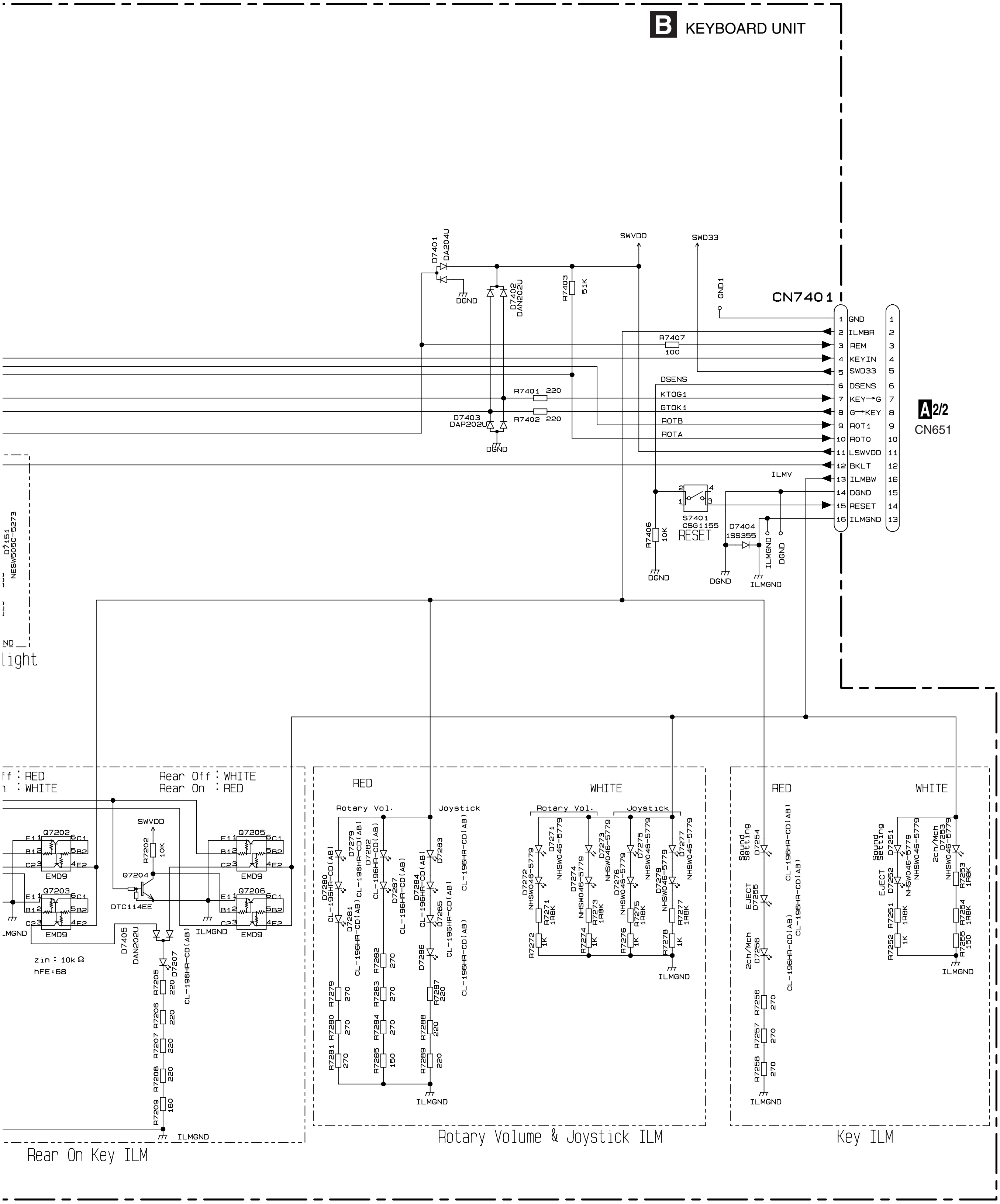
B-a

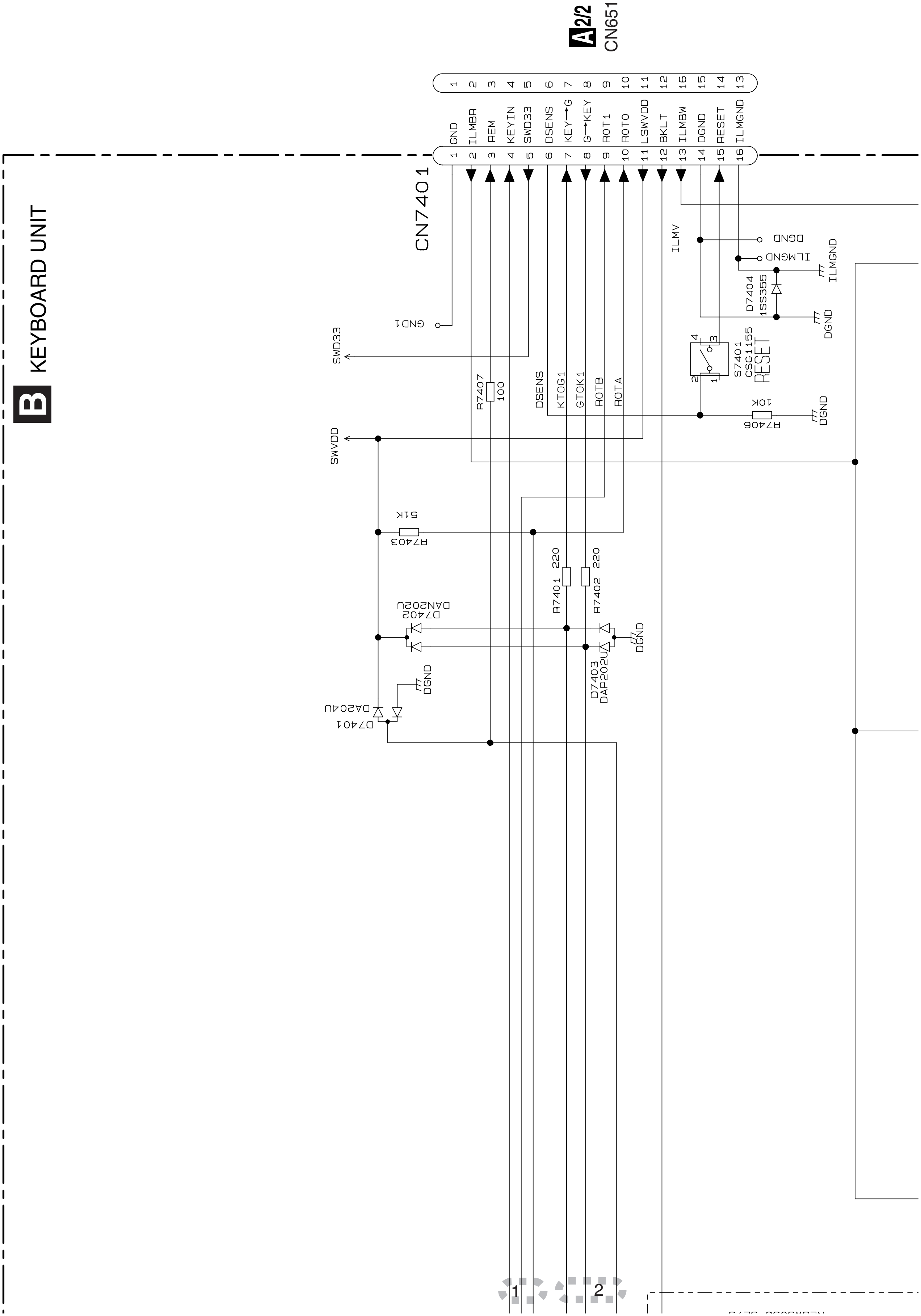

SWD33
R7103 8R2K
S7104 CSG1155 EJECT
R7104 1R2K
R7105 1R2K
R7106 1R8K
R7107 3R3K
R7108 8R2K
SOURCE & VOLUME
S7105 CSD1140
S7101 CSG1155 Rear On
S7103 CSG1155 Sound Setting
S7102 CSG1155 2ch/Mch
R7101 0R0
R7102 0R0
D7101 EDZ6R8(B)
D7102 EDZ6R8(B)
ILMGND
DGND
S7106 CSX1109
JOYSTICK
COMMON CENTER
SWVDD
R7001 4R7K
R7002 100K
R7003 100
R7004 100
R7005 47K
R7006 1K
IC7002 BD4834G
R7007 8R2K
C7002 2R2
IC7003 SBX3050-01
OUT GND VCC
R7012 47
C7010 10
R7008 47K
R7009 4R7K
C7004 R1
X7001 CSS1631 8.16MHz
Q7001 DTC123JU
R7014 560 D
R7015 1R2KD
R7016 1R5KD
R7151 150
R7152 100
D7151 NESW505C-5273
Q7151 DTC123JU
R7153 360
R7154 220
Sub LCD Backlight
KST1 KST2 KDT0 KDT1 KDT2 GTOK2 KTOG2
IC7001 PD2073A
C7005 R1
C7006 R1
C7007 R1
C7008 R1
C7009 R1
R7013 10K
R7010 100
R7011 100
LCD7001 CAW1921
SEG0–SEG55
COM0–COM7
Rear Off : RED
Rear On : WHITE
Q7201 DTC114EE
R7201 10K
Q7202 EMD9
Q7203 EMD9
D7406 DAN202U
H:Rear ON
L:Rear OFF
zin : 10kΩ
hFE:68
D7208 NHSW046-5779
R7210 1R8K
R7211 1R8K
R7212 150
ILMGND
Rear On Key

Action	Shorting Port
CENTER	6:4
RIGHT	1:4
LEFT	3:4
DOWN	5:4
UP	2:4

B

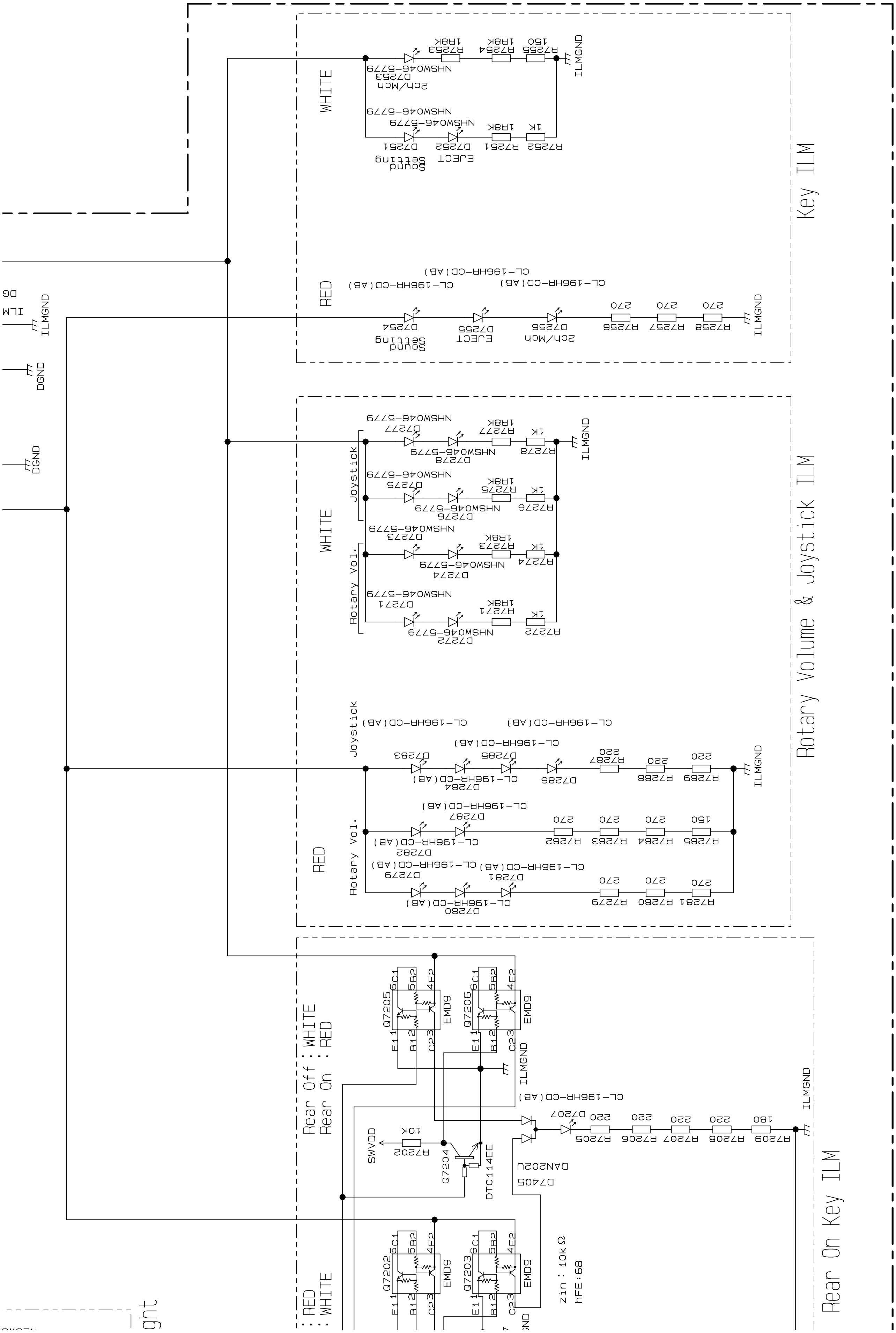
B-b


B KEYBOARD UNIT
CN7401
1 GND
2 ILMBR
3 REM
4 KEYIN
5 SWD33
6 DSENS
7 KEY→G
8 G→KEY
9 ROT1
10 ROT0
11 LSWVDD
12 BKLT
13 ILMBW
14 DGND
15 RESET
16 ILMGND
A 2/2
CN651
SWVDD
SWD33
GND1
D7401
DA204U
D7402
DAN202U
D7403
DAP202U
R7403
51K
R7407
100
R7401 220
R7402 220
DSENS
KTOG1
GTOK1
ROTB
ROTA
ILMV
S7401
CSG1155
RESET
R7406
10K
D7404
1SS355
DGND
ILMGND
D7151
NESW505C-5273
light
Rear Off : WHITE
Rear On : RED
Q7202
Q7203
Q7205
Q7206
EMD9
SWVDD
R7202
10K
Q7204
DTC114EE
D7405
DAN202U
D7207
CL-196HR-CD(AB)
zin : 10kΩ
hFE : 68
R7205 220
R7206 220
R7207 220
R7208 220
R7209 180
ILMGND
Rear On Key ILM
RED
Rotary Vol.
Joystick
D7279
D7280
D7281
D7282
D7283
D7284
D7285
D7286
D7287
CL-196HR-CD(AB)
R7279 270
R7280 270
R7281 270
R7282 270
R7283 270
R7284 270
R7285 150
R7287 220
R7288 220
R7289 220
WHITE
D7271
D7272
D7273
D7274
D7275
D7276
D7277
D7278
NHSW046-5779
R7271 1R8K
R7272 1K
R7273 1R8K
R7274 1K
R7275 1R8K
R7276 1K
R7277 1R8K
R7278 1K
Rotary Volume & Joystick ILM
RED
Sound Setting
D7254
EJECT
D7255
2ch/Mch
D7256
R7256 270
R7257 270
R7258 270
WHITE
Sound Setting
D7251
EJECT
D7252
2ch/Mch
D7253
R7251 1R8K
R7252 1K
R7253 1R8K
R7254 1R8K
R7255 150
Key ILM


B KEYBOARD UNIT
A 2/2 CN651
CN7401
1 GND
2 ILMBR
3 REM
4 KEYIN
5 SWD33
6 DSENS
7 KEY→G
8 G→KEY
9 ROT1
10 ROTO
11 LSWVDD
12 BKLT
13 ILMBW
14 DGND
15 RESET
16 ILMGND
GND1
SWD33
SWVDD
R7407 100
DSENS
KTOG1
GTOK1
ROTB
ROTA
ILMV
DGND
ILMGND
D7404 1SS355
S7401 CSG1155 RESET
R7406 10K
R7403 51K
R7401 220
R7402 220
D7402 DAN202U
D7403 DAP202U
D7401 DA204U
1
2

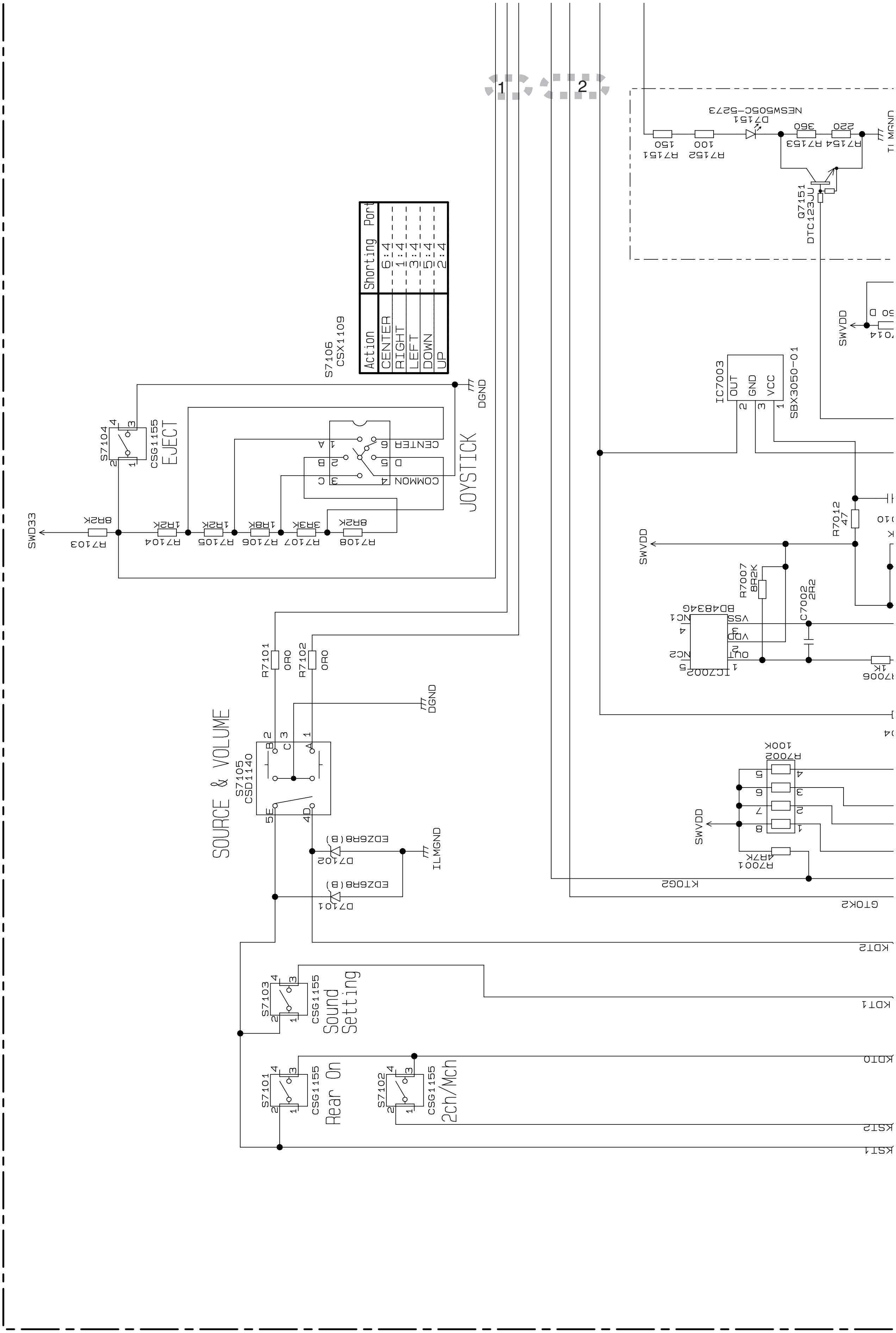
B-a B-b

B-b

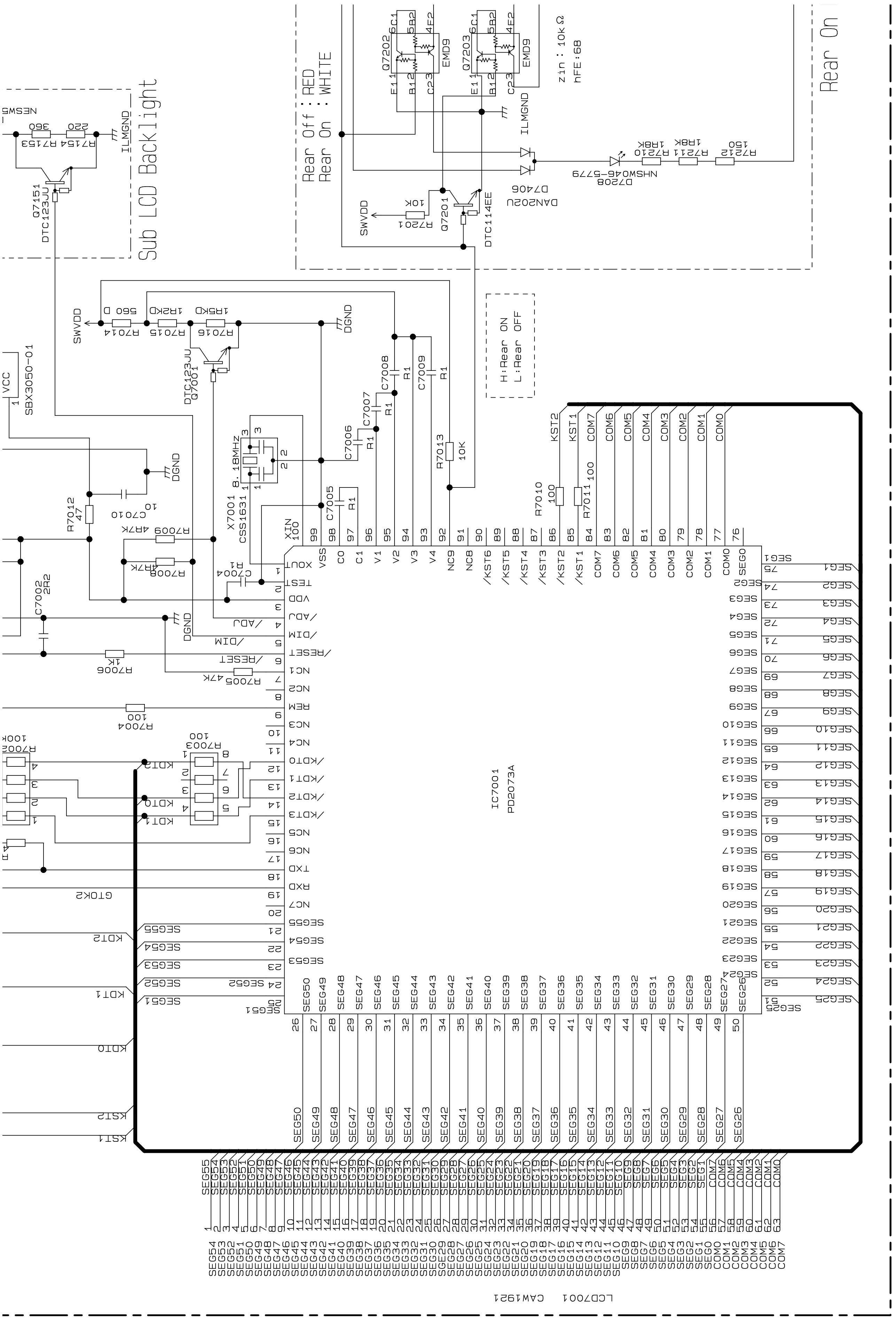

Key ILM
WHITE
RED
2ch/Mch
D7253
NHSW046-5779
R7253 1R8K
R7254 1R8K
R7255 150
ILMGND
Sound Setting
D7251
EJECT
D7252
R7251 1R8K
R7252 1K
D7254
D7255
D7256
CL-196HR-CD(AB)
R7256 270
R7257 270
R7258 270
ILM
DG
DGND
Rotary Volume & Joystick ILM
Joystick
Rotary Vol.
D7277
D7278
D7275
D7276
D7273
D7274
D7271
D7272
R7277 1R8K
R7278 1K
R7275 1R8K
R7276 1K
R7273 1R8K
R7274 1K
R7271 1R8K
R7272 1K
D7283
D7284
D7285
D7286
R7287 220
R7288 220
R7289 220
D7287
D7282
R7282 270
R7283 270
R7284 270
R7285 150
D7279
D7280
D7281
R7279 270
R7280 270
R7281 270
Rear Off : WHITE
Rear On : RED
Q7205
Q7206
EMD9
6C1 5B2 4F2
E11 B12 C23
R7202 10K
SWVDD
Q7204
DTC114EE
D7405
DAN202U
D7207
R7205 220
R7206 220
R7207 220
R7208 220
R7209 180
Rear On Key ILM
Q7202
Q7203
zin : 10kΩ
hFE : 68
: RED
: WHITE
ght

A
B
C
D
E
F
B-a B-b

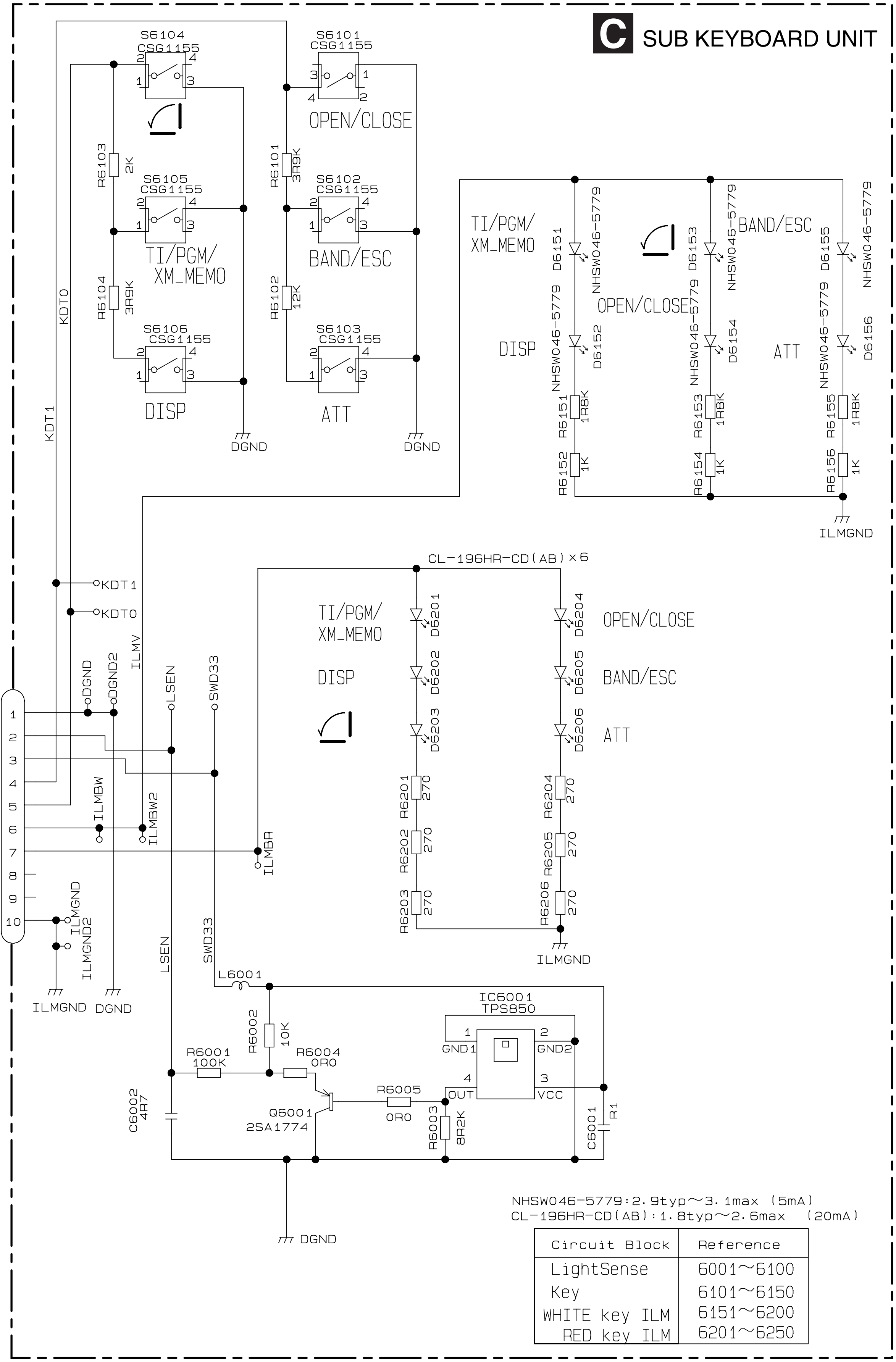
B-b


1
2
S7106
CSX1109
Action
CENTER
RIGHT
LEFT
DOWN
UP
Shorting Port
6 : 4
1 : 4
3 : 4
5 : 4
2 : 4
DGND
S7104
CSG1155
EJECT
JOYSTICK
CENTER
COMMON
SWD33
R7103 8R2K
R7104 1R2K
R7105 1R2K
R7106 1R8K
R7107 3R3K
R7108 8R2K
R7101 0R0
R7102 0R0
SOURCE & VOLUME
S7105
CSD1140
D7102 EDZ6R8(B)
D7101 EDZ6R8(B)
ILMGND
S7103
CSG1155
Sound Setting
S7101
CSG1155
Rear On
S7102
CSG1155
2ch/Mch
KDT2
KDT1
KDT0
KST2
KST1
KTOG2
GTOK2
R7151 150
R7152 100
D7151
NESW505C-5273
R7153 360
R7154 220
ILMGND
Q7151
DTC123JU
SWVDD
IC7003
SBX3050-01
OUT
GND
VCC
R7012 47
R7007 8R2K
C7002 2R2
IC7002
BD4834G
VSS
VDD
OUT
NC1
NC2
R7006 1K
R7002 100K
R7001 4R7K

B-a


B-b
B-a
Sub LCD Backlight
Q7151
DTC123JU
R7153 360
R7154 220
NESW5
ILMGND
Rear Off : RED
Rear On : WHITE
Rear On
Q7202
Q7203
EMD9
zin : 10kΩ
hFE:68
D7406
DAN202U
D7208
NHSW046-5779
R7210 1R8K
R7211 1R8K
R7212 150
Q7201
DTC114EE
R7201 10K
SWVDD
H:Rear ON
L:Rear OFF
R7014 560 D
R7015 1R2KD
R7016 1R5KD
Q7001
DTC123JU
DGND
C7008 R1
C7009 R1
C7007 R1
C7006 R1
C7005 R1
C7004 R1
R7013 10K
X7001
CSS1631
8.18MHz
R7010 100
R7011 100
VCC
SBX3050-01
C7010 10
R7012 47
R7009 4R7K
R7008 4R7K
C7002 2R2
R7006 1K
R7005 47K
R7004 100
R7003 100
R7002 100K
KDT0
KDT1
KDT2
KDT3
GTOK2
KST1
KST2
IC7001
PD2073A
XOUT TEST VDD /ADJ /DIM /RESET NC1 NC2 REM NC3 NC4 /KDT0 /KDT1 /KDT2 /KDT3 NC5 NC6 TXD RXD NC7 SEG55 SEG54 SEG53 SEG52 SEG51
XIN VSS C0 C1 V1 V2 V3 V4 NC9 NC8 /KST6 /KST5 /KST4 /KST3 /KST2 /KST1 COM7 COM6 COM5 COM4 COM3 COM2 COM1 COM0 SEG0
SEG1 SEG2 SEG3 SEG4 SEG5 SEG6 SEG7 SEG8 SEG9 SEG10 SEG11 SEG12 SEG13 SEG14 SEG15 SEG16 SEG17 SEG18 SEG19 SEG20 SEG21 SEG22 SEG23 SEG24 SEG25
SEG50 SEG49 SEG48 SEG47 SEG46 SEG45 SEG44 SEG43 SEG42 SEG41 SEG40 SEG39 SEG38 SEG37 SEG36 SEG35 SEG34 SEG33 SEG32 SEG31 SEG30 SEG29 SEG28 SEG27 SEG26
LCD7001 CAW1921

10.4 SUB KEYBOARD UNIT

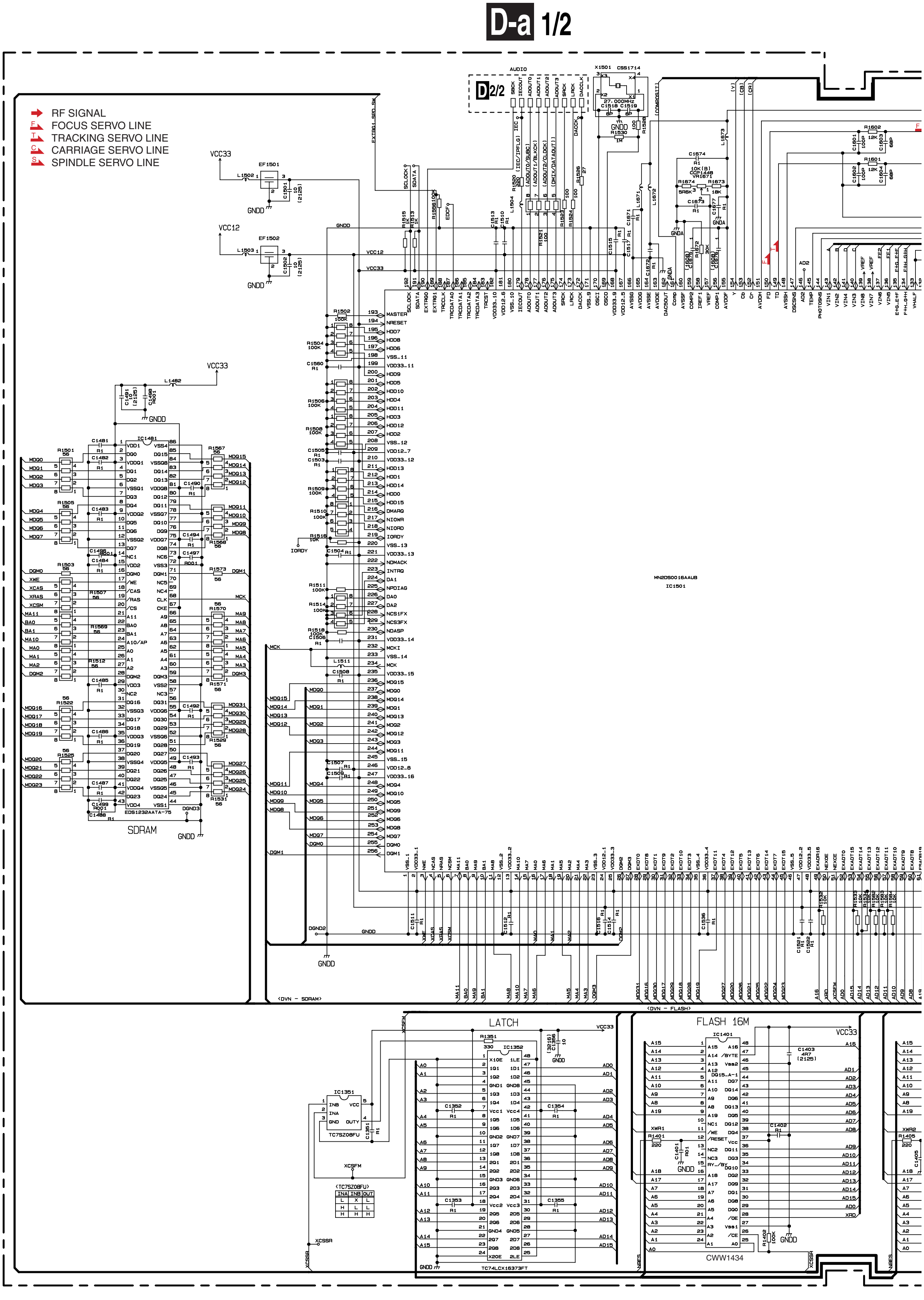

C SUB KEYBOARD UNIT
S6104 CSG1155
S6101 CSG1155
OPEN/CLOSE
R6103 2K
R6101 3R9K
S6105 CSG1155
S6102 CSG1155
TI/PGM/ XM_MEMO
BAND/ESC
R6104 3R9K
R6102 12K
S6106 CSG1155
S6103 CSG1155
DISP
ATT
DGND
DGND
KDT0
KDT1
TI/PGM/ XM_MEMO
D6151 NHSW046-5779
D6152 NHSW046-5779
D6153 NHSW046-5779
D6154 NHSW046-5779
D6155 NHSW046-5779
D6156 NHSW046-5779
BAND/ESC
OPEN/CLOSE
DISP
ATT
R6151 1R8K
R6152 1K
R6153 1R8K
R6154 1K
R6155 1R8K
R6156 1K
ILMGND
CL-196HR-CD(AB)×6
KDT1
KDT0
TI/PGM/ XM_MEMO
DISP
D6201
D6202
D6203
D6204 OPEN/CLOSE
D6205 BAND/ESC
D6206 ATT
R6201 270
R6202 270
R6203 270
R6204 270
R6205 270
R6206 270
ILMGND
CN6001
G 2/2 CN4801
DGND 1
LSEN 2
SWVDD33 3
KDT1 4
KDT0 5
ILMBW 6
ILMBR 7
ILMG 8
ILMR 9
ILMGND 10
DGND
DGND2
ILMV
LSEN
SWD33
ILMBW
ILMBW2
ILMBR
ILMGND
ILMGND2
ILMGND
DGND
LSEN
SWD33
L6001
IC6001 TPS850
1 GND1
2 GND2
4 OUT
3 VCC
R6002 10K
R6001 100K
R6004 0R0
R6005 0R0
Q6001 2SA1774
R6003 8R2K
C6002 4R7
C6001 R1
DGND

NHSW046-5779:2.9typ～3.1max (5mA)
CL-196HR-CD(AB):1.8typ～2.6max (20mA)

Circuit Block	Reference
LightSense	6001～6100
Key	6101～6150
WHITE key ILM	6151～6200
RED key ILM	6201～6250

C

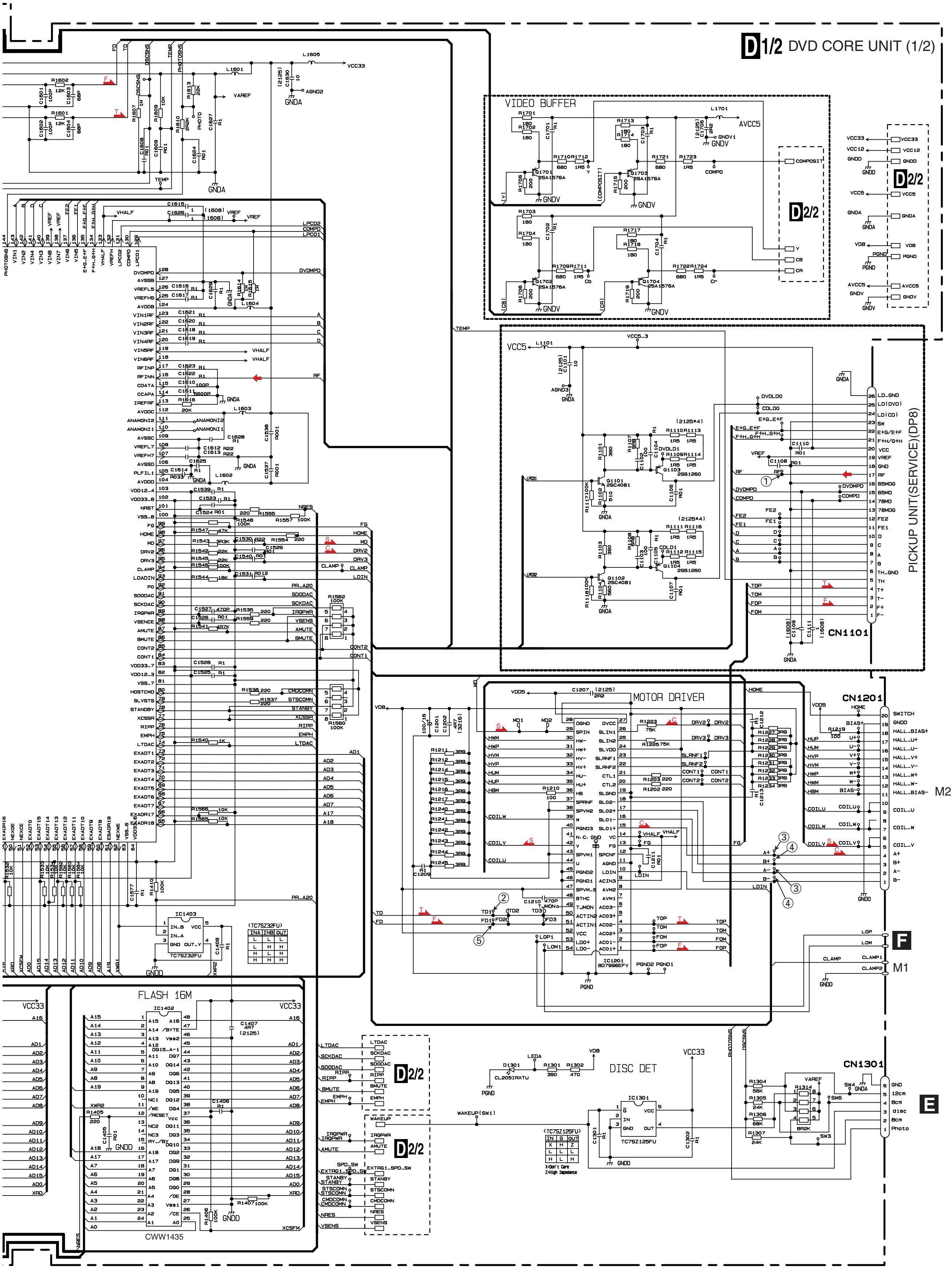
10.5 DVD CORE UNIT(1/2)(GUIDE PAGE)



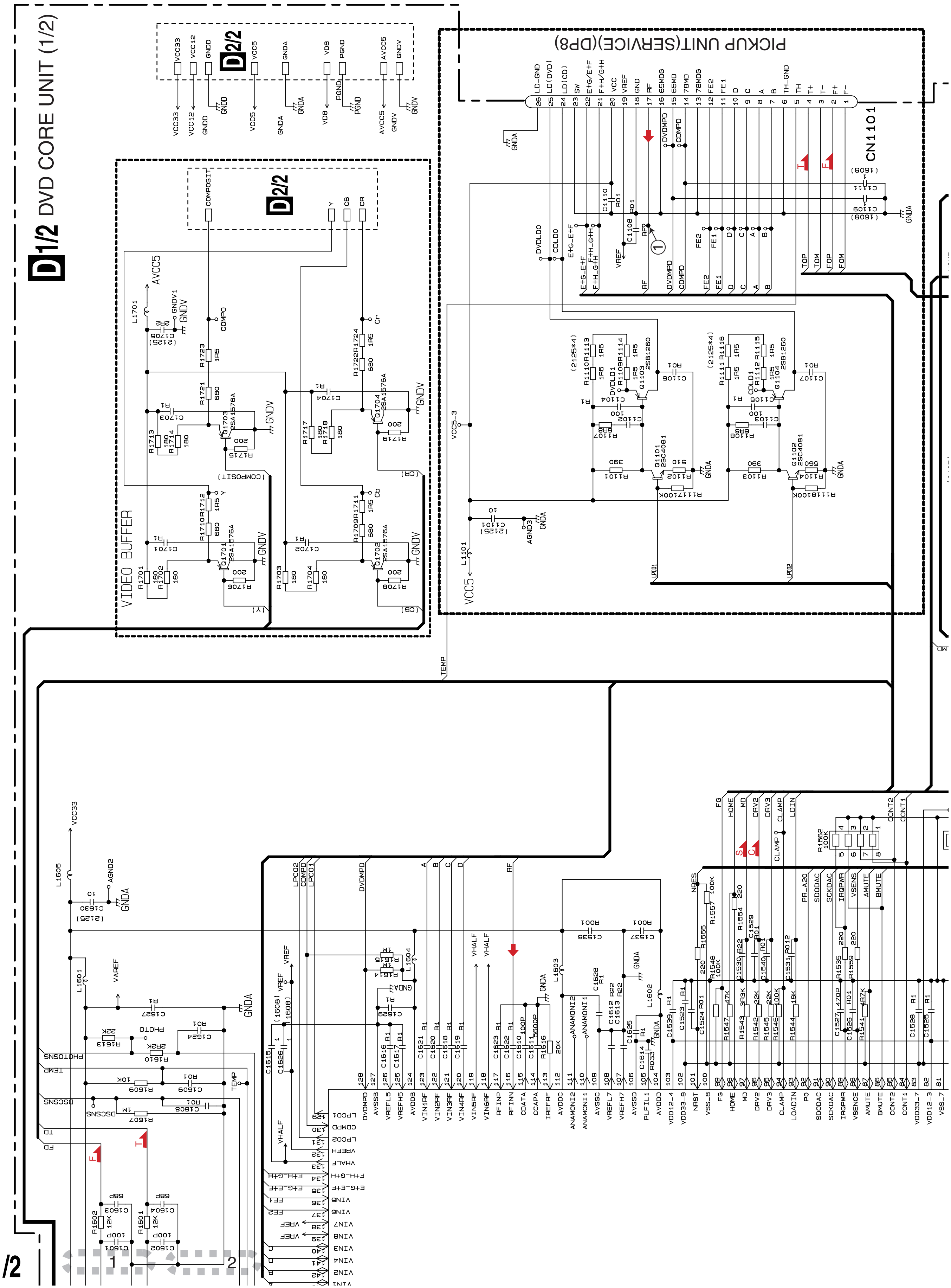
D-a 1/2
RF SIGNAL
FOCUS SERVO LINE
TRACKING SERVO LINE
CARRIAGE SERVO LINE
SPINDLE SERVO LINE
D 2/2
AUDIO
X1501 CSS1714
27.000MHz
VCC33
VCC12
EF1501
EF1502
GNDD
GNDA
IC1481
EDS1232AATA-75
SDRAM
MN2DS0016AAUB
IC1501
<DVN - SDRAM>
<DVN - FLASH>
LATCH
IC1352
TC74LCX16373FT
IC1351
TC7SZ08FU
XCSFM
XCSSR
FLASH 16M
IC1401
CWW1434

INA	INB	OUT
L	X	L
H	L	L
H	H	H

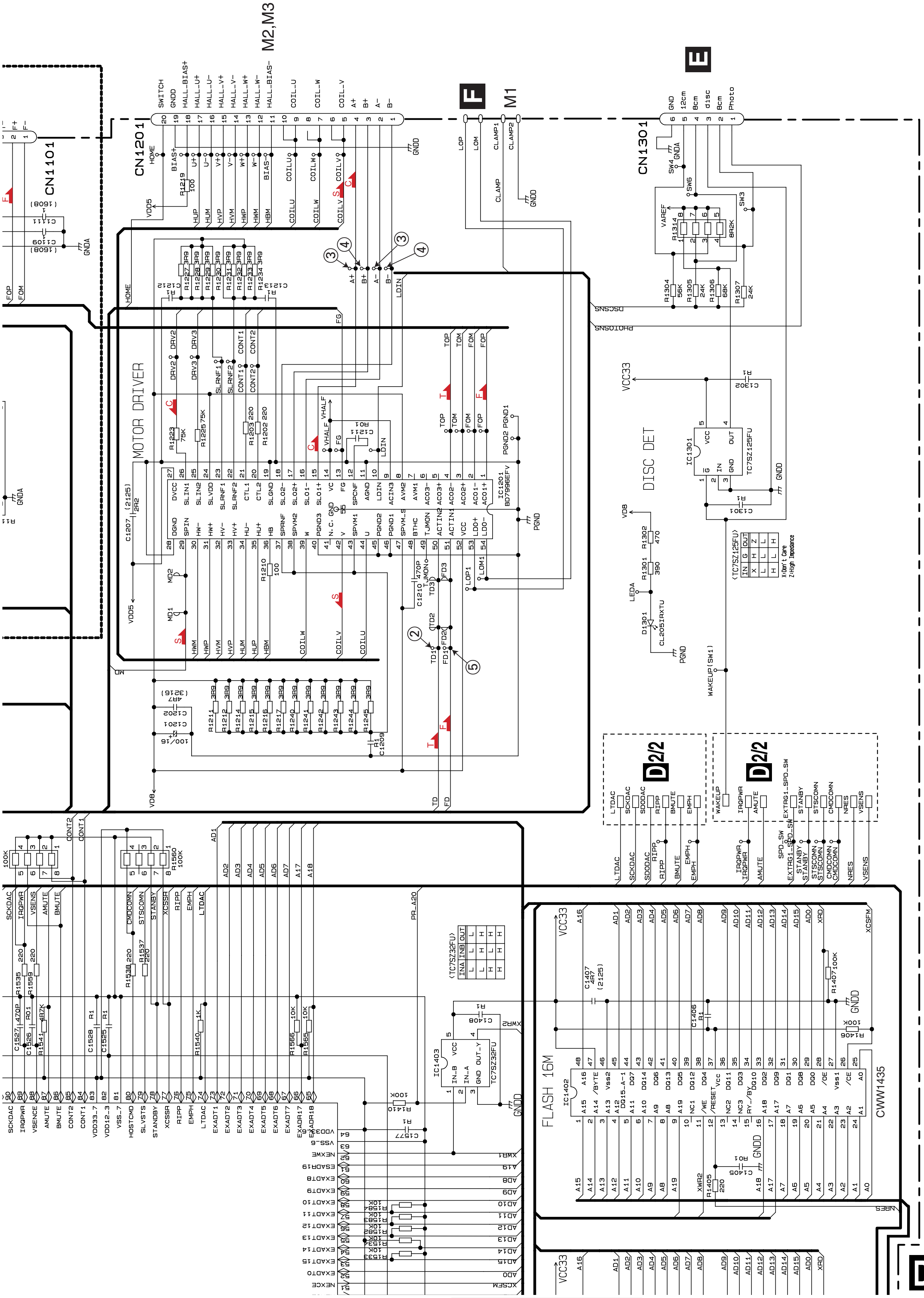
D1/2


D1/2 DVD CORE UNIT (1/2)
VIDEO BUFFER
D2/2
PICKUP UNIT(SERVICE)(DP8)
CN1101
MOTOR DRIVER
IC1201
BD7996EFV
CN1201
M2,M3
F
M1
FLASH 16M
IC1402
CWW1435
IC1403
TC7SZ32FU
DISC DET
IC1301
TC7SZ125FU
CN1301
E
VCC33
VCC5
AVCC5
GNDA
GNDV
GNDD
PGND

D-a
D-b

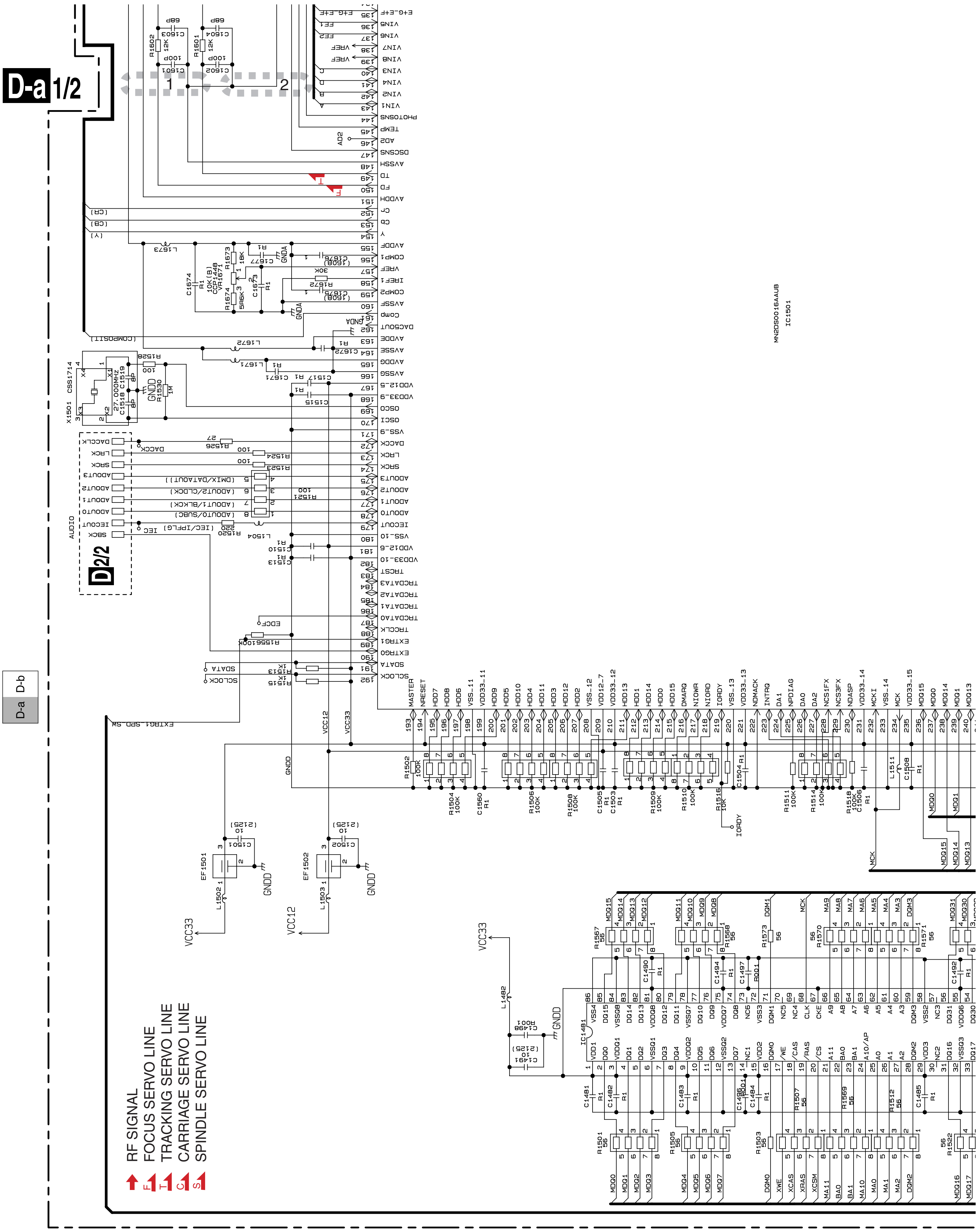

D 1/2 DVD CORE UNIT (1/2)
D 2/2
VCC33
VCC12
GNDD
VCC5
GNDA
VD8
PGND
AVCC5
GNDV
COMPOSIT
Y
CB
CR
VIDEO BUFFER
Q1701 2SA1576A
Q1702 2SA1576A
Q1703 2SA1576A
Q1704 2SA1576A
L1701
COMPO
PICKUP UNIT(SERVICE)(DP8)
CN1101
LD_GND
LD(DVD)
LD(CD)
SW
E+G,E+F
F+H,G+H
VCC
VREF
GND
RF
65MDG
65MD
78MD
78MDG
FE2
FE1
D
C
A
B
TH_GND
TH
T+
T-
F+
F-
Q1101 2SC4081
Q1102 2SC4081
Q1103 2SB1260
Q1104 2SB1260
VCC5_3
VCC5
L1101
AGND3
LPD01
LPD02
TEMP
DVDMPD
CDMPD
TOP
TOM
FOP
FOM
L1605
VCC33
AGND2
L1601
VAREF
PHOTOSNS
DSCSNS
TD
FD
L1603
L1604
L1602
R1562
FG
HOME
MD
DRV2
DRV3
CLAMP
LDIN
CONT2
CONT1
NRES
PR_A20
SDODAC
SCKDAC
IRQPWR
VSENS
AMUTE
BMUTE
VHALF
VREF

D-a 1/2


M2,M3
M1
E
F
CN1201
CN1301
CN1101
MOTOR DRIVER
IC1201 BD7996EFV
DISC DET
IC1301 TC7SZ125FU
‹TC7SZ125FU›
X:Don't Care
Z:High Impedance
IC1403 TC7SZ32FU
‹TC7SZ32FU›
FLASH 16M
IC1402 CWW1435
D2/2
D2/2
VCC33
GNDD
GNDA
PGND

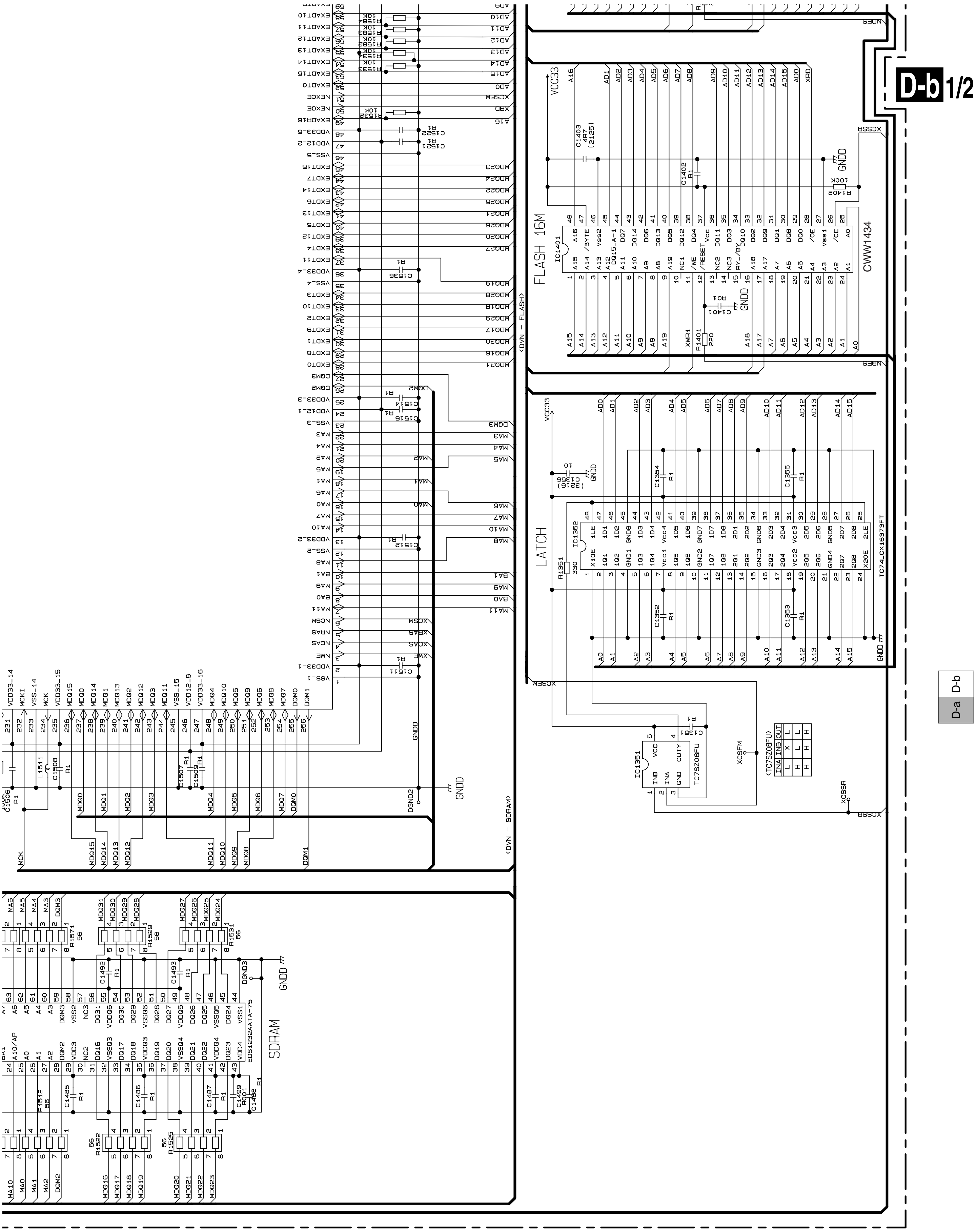
D-b 1/2

D-a D-b


D-a 1/2
IC1501
MN2DS0016AAUB
IC1481
X1501 CSS1714
27.000MHz
D 2/2
AUDIO
D-b
D-a
EF1501
EF1502
VCC33
VCC12
GNDD
GNDA
RF SIGNAL
FOCUS SERVO LINE
TRACKING SERVO LINE
CARRIAGE SERVO LINE
SPINDLE SERVO LINE
F
T
C
S

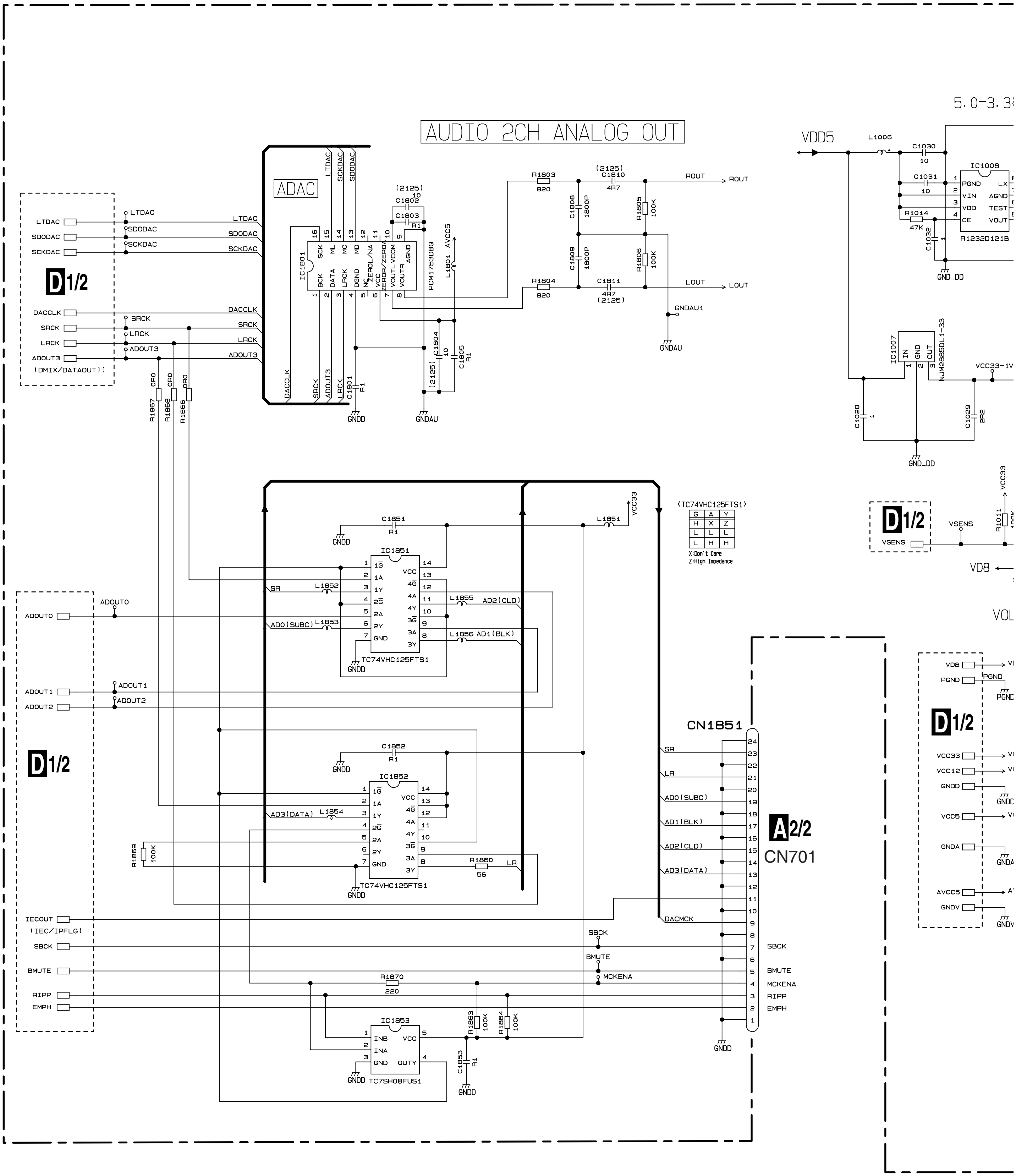
A
B
C
D
E
F

D-a 1/2


D-b 1/2
FLASH 16M
IC1401
CWW1434
VCC33
GNDD
C1403
4R7
(2125)
C1402
R1
R1402
100K
R1401
220
C1401
R1
XWR1
NBES
XCSSR
XRD
<DVN - FLASH>
LATCH
IC1352
TC74LCX16373FT
R1351
330
C1356
10
(3216)
C1354
C1355
C1352
C1353
XCSEM
IC1351
TC7SZ08FU
INB
INA
GND
VCC
OUTY
C1351
XCSFM
<TC7SZ08FU>
INA INB OUT
L X L
H L L
H H H
XCSSR
<DVN - SDRAM>
DGND2
GNDD
L1511
C1508
C1507
C1509
MCK
SDRAM
EDS1232AATA-75
DGND3
GNDD
C1492
C1493
R1571
R1529
R1531
R1512
R1522
R1525
56
C1485
C1486
C1487
C1489
C1488
R1532
10K
R1533
R1534
R1582
R1583
R1584
C1522
C1521
C1536
C1514
C1516
C1512
C1511
D-a
D-b

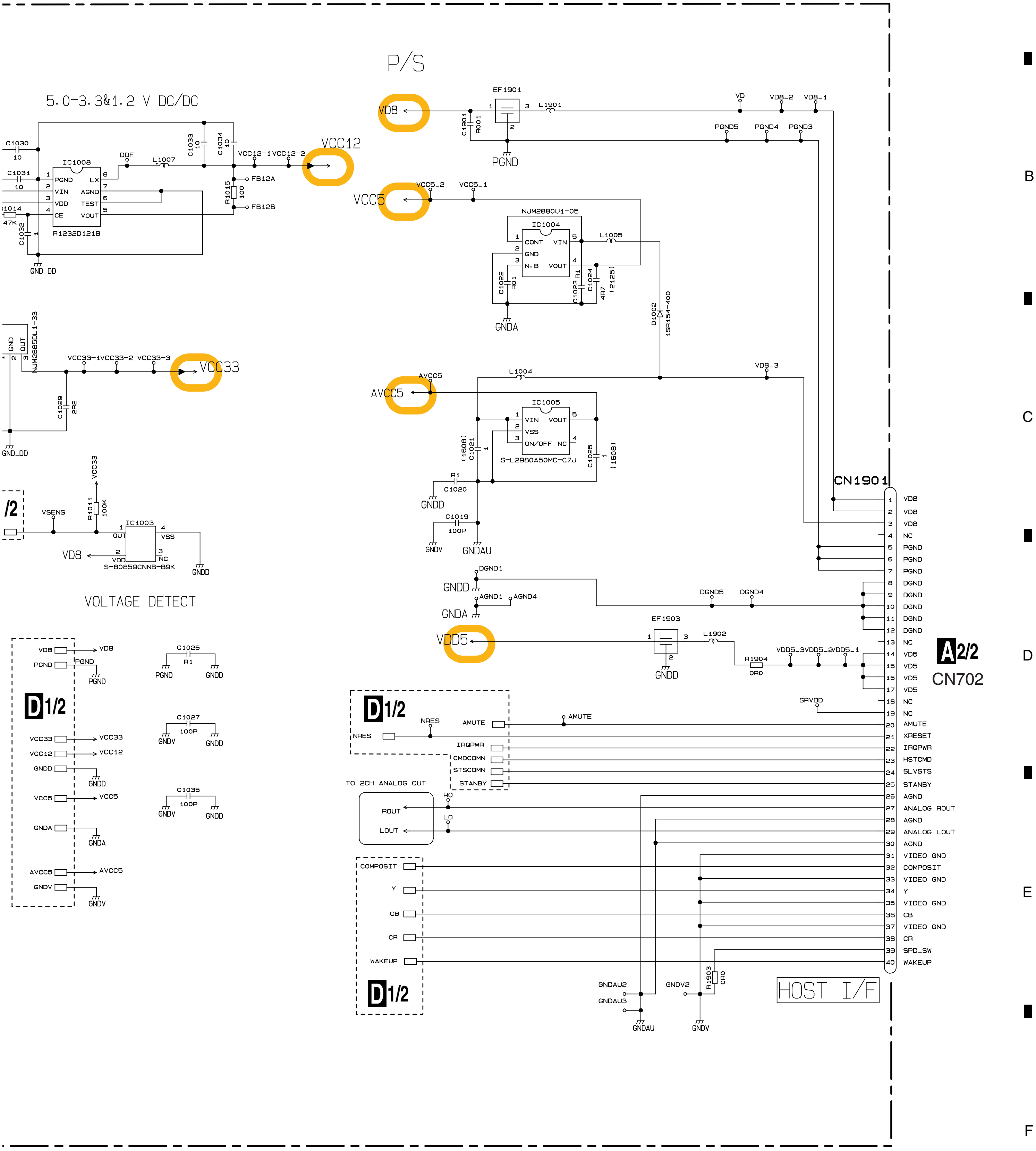
D-a 1/2

10.6 DVD CORE UNIT(2/2)


AUDIO 2CH ANALOG OUT
ADAC
IC1801
PCM1753DBQ
SCK ML MC MD ZEROL/NA ZEROR/ZEROA VOUTL VCOM VOUTR AGND
BCK DATA LRCK DGND NC VCC
LTDAC SCKDAC SDODAC
LTDAC
SDODAC
SCKDAC
DACCLK
SRCK
LRCK
ADOUT3
(DMIX/DATAOUT))
D1/2
C1801 R1
GNDD
C1802 (2125) 10
C1803 R1
L1801 AVCC5
C1804 10 (2125)
C1805 R1
GNDAU
R1803 820
R1804 820
C1810 4R7 (2125)
C1811 4R7 (2125)
C1808 1800P
C1809 1800P
R1805 100K
R1806 100K
ROUT
LOUT
GNDAU1
GNDAU
R1867 0R0
R1868 0R0
R1866 0R0
5.0-3.3
VDD5
L1006
C1030 10
C1031 10
IC1008
PGND VIN VDD CE
LX AGND TEST VOUT
R1014 47K
C1032 1
R1232D121B
GND_DD
IC1007
IN GND OUT
NJM2885DL1-33
VCC33-1V
C1028 1
C1029 2R2
GND_DD
(TC74VHC125FTS1)
G A Y
H X Z
L L L
L H H
X:Don't Care
Z:High Impedance
D1/2
VSENS
VSENS
R1011 100
VCC33
VD8
VOL
C1851 R1
GNDD
L1851
VCC33
IC1851
1G 1A 1Y 2G 2A 2Y GND
VCC 4G 4A 4Y 3G 3A 3Y
SR
L1852
L1853
AD0(SUBC)
L1855 AD2(CLD)
L1856 AD1(BLK)
TC74VHC125FTS1
GNDD
ADOUT0
ADOUT0
ADOUT1
ADOUT1
ADOUT2
ADOUT2
D1/2
C1852 R1
GNDD
IC1852
AD3(DATA)
L1854
R1869 100K
R1860 56
LR
TC74VHC125FTS1
GNDD
CN1851
SR
LR
AD0(SUBC)
AD1(BLK)
AD2(CLD)
AD3(DATA)
DACMCK
A2/2
CN701
SBCK
BMUTE
MCKENA
RIPP
EMPH
GNDD
IECOUT
(IEC/IPFLG)
SBCK
BMUTE
RIPP
EMPH
SBCK
BMUTE
MCKENA
R1870 220
IC1853
INB INA GND
VCC OUTY
TC7SH08FUS1
GNDD
R1863 100K
R1864 100K
C1853 R1
GNDD
D1/2
VD8
PGND
PGND
VCC33
VCC12
GNDD
VCC5
GNDA
AVCC5
GNDV

D2/2

D2/2 DVD CORE UNIT (2/2)


P/S
5.0-3.3&1.2 V DC/DC
IC1008
R1232D121B
PGND
VIN
VDD
CE
LX
AGND
TEST
VOUT
DDF
L1007
C1030
C1031
C1032
C1033
C1034
R1015
FB12A
FB12B
VCC12-1
VCC12-2
VCC12
GND_DD
NJM2885DL1-33
VCC33-1
VCC33-2
VCC33-3
VCC33
C1029
VOLTAGE DETECT
IC1003
S-80859CNNB-B9K
VSENS
R1011
100K
VD8
GNDD
VD8
EF1901
L1901
C1901
R001
PGND
VD
VD8_2
VD8_1
PGND5
PGND4
PGND3
VCC5
VCC5_2
VCC5_1
NJM2880U1-05
IC1004
CONT
GND
N.B
L1005
C1022
C1023
C1024
D1002
1SR154-400
GNDA
AVCC5
L1004
VD8_3
IC1005
S-L2980A50MC-C7J
VSS
ON/OFF
C1021
C1025
C1020
C1019
100P
GNDV
GNDAU
DGND1
AGND1
AGND4
DGND5
DGND4
VDD5
EF1903
L1902
R1904
0R0
VDD5_3
VDD5_2
VDD5_1
SRVDD
CN1901
CN702
A2/2
D1/2
C1026
C1027
C1035
NRES
AMUTE
IRQPWR
CMDCOMN
STSCOMN
STANBY
TO 2CH ANALOG OUT
ROUT
LOUT
RO
LO
COMPOSIT
Y
CB
CR
WAKEUP
GNDAU2
GNDAU3
GNDV2
R1903
HOST I/F
1 VD8
2 VD8
3 VD8
4 NC
5 PGND
6 PGND
7 PGND
8 DGND
9 DGND
10 DGND
11 DGND
12 DGND
13 NC
14 VD5
15 VD5
16 VD5
17 VD5
18 NC
19 NC
20 AMUTE
21 XRESET
22 IRQPWR
23 HSTCMD
24 SLVSTS
25 STANBY
26 AGND
27 ANALOG ROUT
28 AGND
29 ANALOG LOUT
30 AGND
31 VIDEO GND
32 COMPOSIT
33 VIDEO GND
34 Y
35 VIDEO GND
36 CB
37 VIDEO GND
38 CR
39 SPD_SW
40 WAKEUP

D2/2

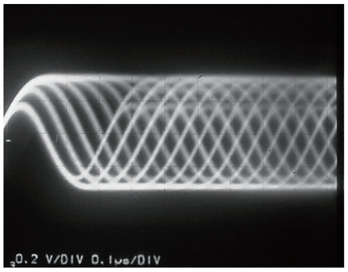
● Waveforms

Note:1. The encircled number denote measuring points in the circuit diagram.
2. Reference voltage: 1.65 V(TD1,FD1)(=VHALF)
2.2 V(RF)(=VREF)

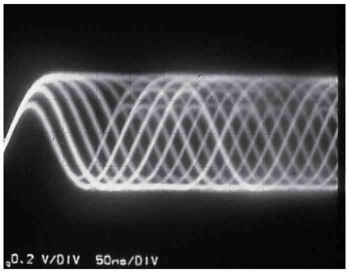
In the waveform, it is seeing on the GND standard.
Offset of 1.65 V or 2.2 V is put in.

1 RF
2 TD1
3 A+, A-
4 B+, B-
5 FD1

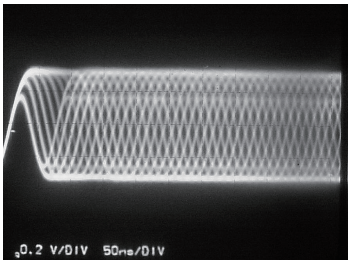
①RF 0.2 V/div(AC) 0.1 µs/div
CDRF(x 4 CLV)



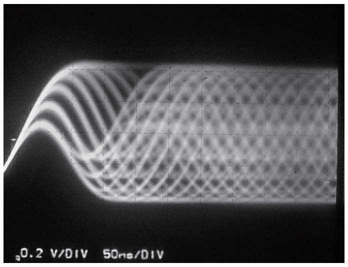
①RF 0.2 V/div(AC) 50 ns/div
CDRF(x 20 CAV Inner peripheral)



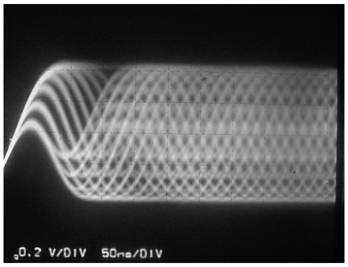
①RF 0.2 V/div(AC) 50 ns/div
CDRF(x 20 CAV Peripheral)



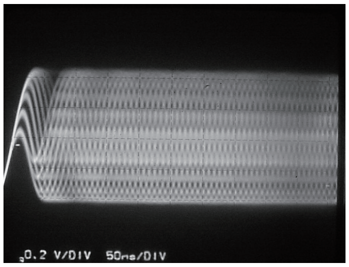
①RF 0.2 V/div(AC) 50 ns/div
DVDRF(x 1.3 ZCAV)



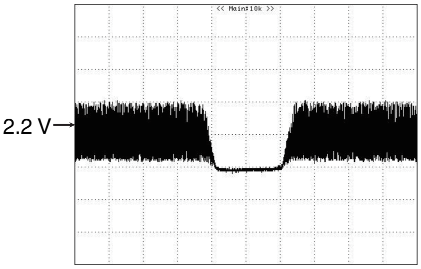
①RF 0.2 V/div(AC) 50 ns/div
DVDRF(x 5 CAV Inner peripheral)



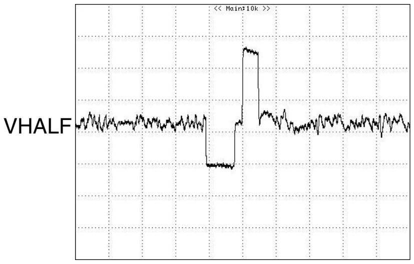
①RF 0.2 V/div(AC) 50 ns/div
DVDRF(x 5 CAV Peripheral)



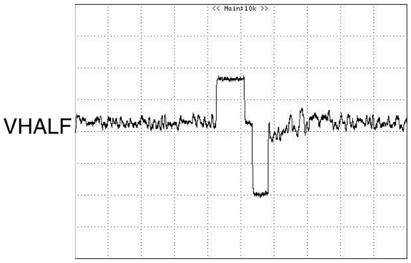
①RF 0.5 V/div 100 µs/div
DVDRF(BD1 mm)



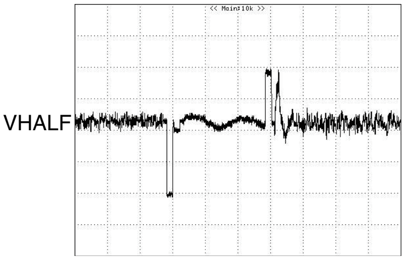
②TD1 0.1 V/div 100 µs/div
Interval FWD



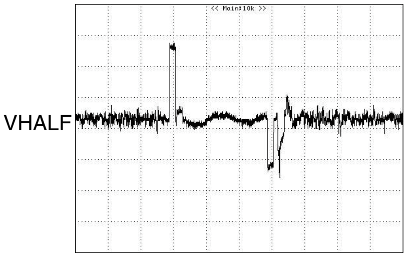
②TD1 0.1 V/div 100 µs/div
Interval REV



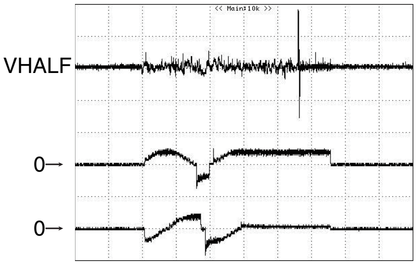
②TD1 0.1 V/div 500 µs/div
Multi 32 FWD



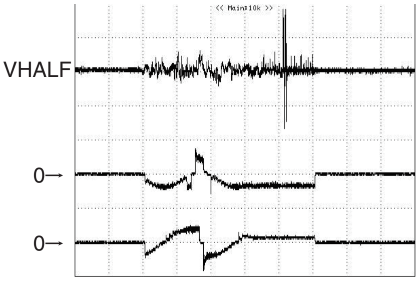
②TD1 0.1 V/div 500 µs/div
Multi 32 REV



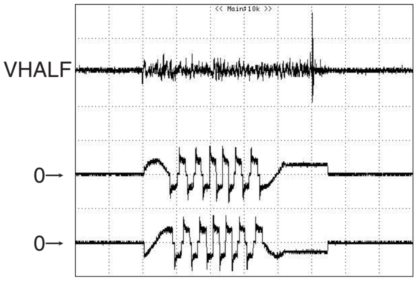
②CH1 : TD1 0.5 V/div 10 ms/div
③CH2 : A^+-A^- 10.0 V/div 10 ms/div
(LPF of the oscilloscope is set to 10 kHz)
④CH3 : B^+-B^- 10.0 V/div 10 ms/div
(LPF of the oscilloscope is set to 10 kHz)
Traverse 900 FWD(Short)



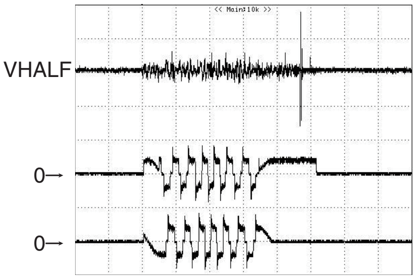
②CH1 : TD1 0.5 V/div 10 ms/div
③CH2 : A^+-A^- 10.0 V/div 10 ms/div
(LPF of the oscilloscope is set to 10 kHz)
④CH3 : B^+-B^- 10.0 V/div 10 ms/div
(LPF of the oscilloscope is set to 10 kHz)
Traverse 900 REV(Short)



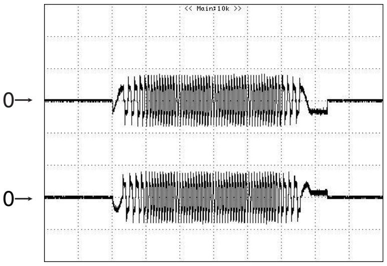
②CH1 : TD1 0.5 V/div 20 ms/div
③CH2 : A^+-A^- 10.0 V/div 20 ms/div
(LPF of the oscilloscope is set to 10 kHz)
④CH3 : B^+-B^- 10.0 V/div 20 ms/div
(LPF of the oscilloscope is set to 10 kHz)
Traverse 5 000 FWD(Long)



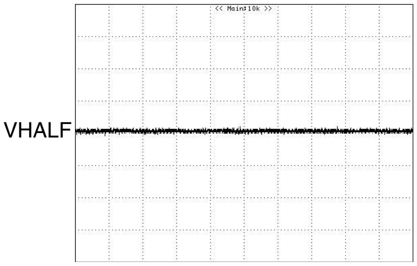
②CH1 : TD1 0.5 V/div 20 ms/div
③CH2 : A^+-A^- 10.0 V/div 20 ms/div
(LPF of the oscilloscope is set to 10 kHz)
④CH3 : B^+-B^- 10.0 V/div 20 ms/div
(LPF of the oscilloscope is set to 10 kHz)
Traverse 5 000 REV(Long)



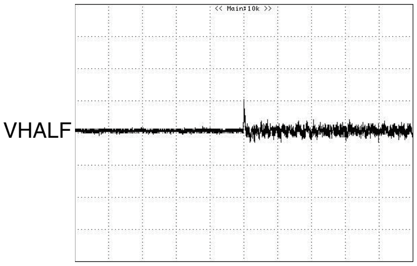
③CH : A^+-A^- 10 V/div 50 ms/div
④CH2 : B^+-B^-
ID search Inside → Outside



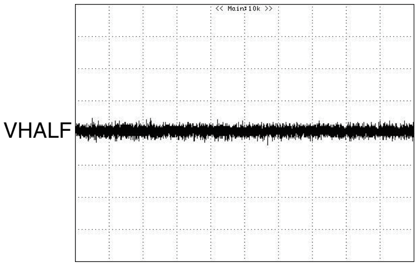
②TD1 0.5 Vdiv 20 ms/div
Play TD



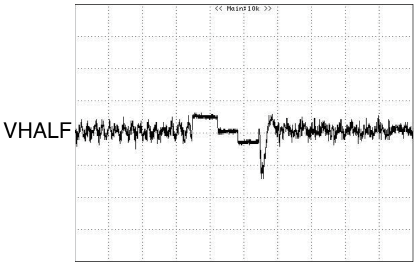
⑤FD1 0.5 V/div 1 ms/div
Focus Close



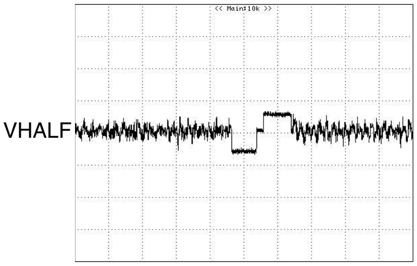
⑤FD1 0.5 V/div 20 ms/div
Play FD



⑤FD1 0.5 V/div 500 µs/div
Focus Jump L0→L1

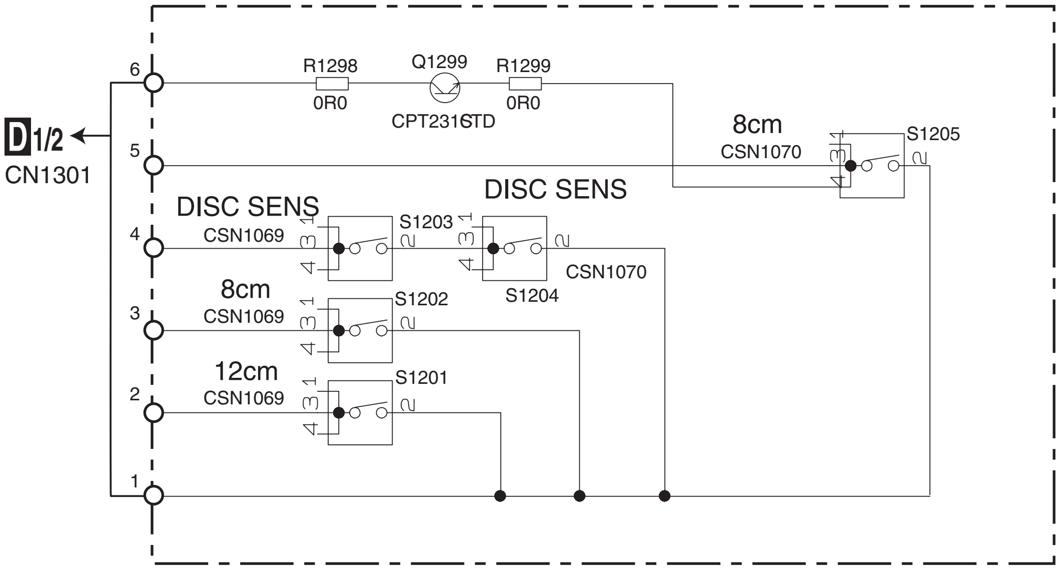


⑤FD1 0.5 V/div 500 µs/div
Focus Jump L1→L0

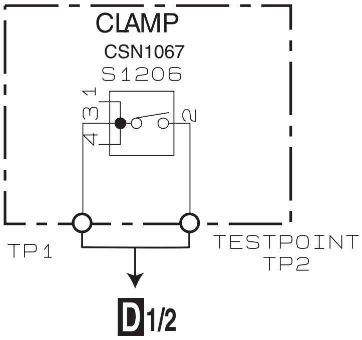


10.7 COMPOUND UNIT(A), COMPOUND UNIT(B)

E COMPOUND UNIT(A)

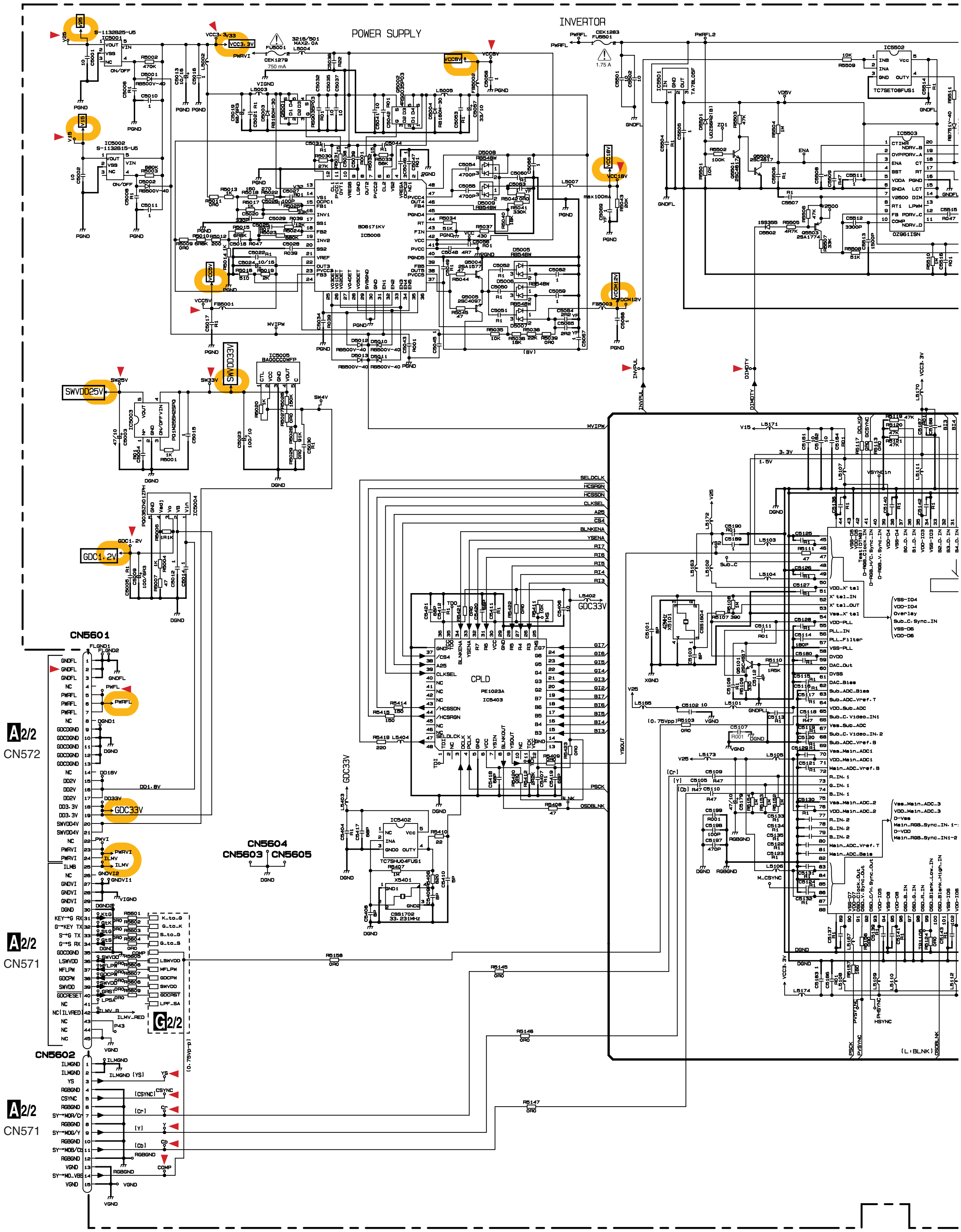

D1/2
CN1301
6
5
4
3
2
1
R1298
0R0
Q1299
CPT2316STD
R1299
0R0
8cm
CSN1070
S1205
DISC SENS
CSN1069
S1203
DISC SENS
S1204
CSN1070
8cm
CSN1069
S1202
12cm
CSN1069
S1201
4 3 1
2

F COMPOUND UNIT(B)


CLAMP
CSN1067
S1206
4 3 1
2
TP1
TESTPOINT
TP2
D1/2

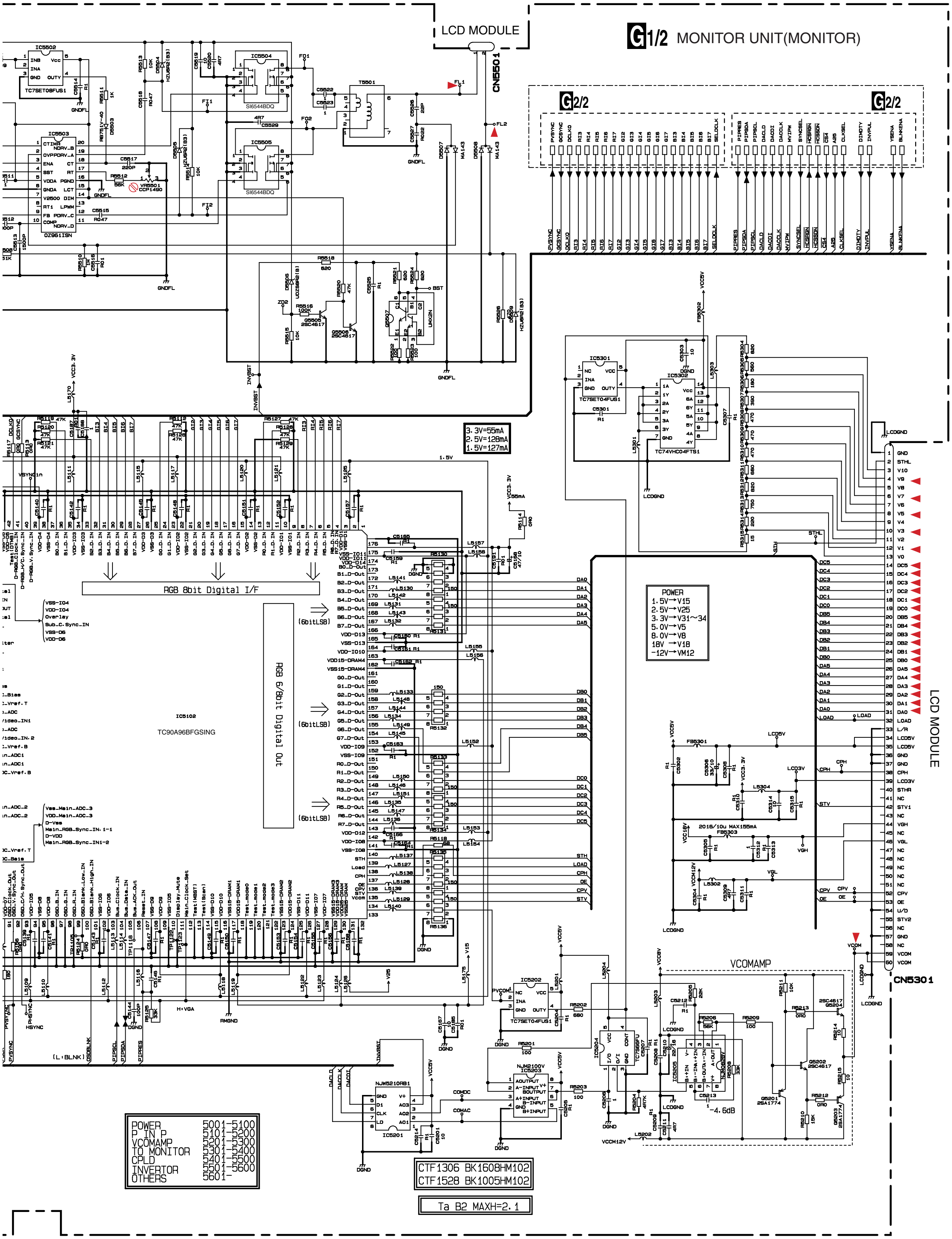
10.8 MONITOR UNIT(MONITOR)(GUIDE PAGE)

G-a 1/2


POWER SUPPLY
INVERTOR
IC5001 S-1132B25-U5
IC5002 S-1132B15-U5
V25
V15
VCC3.3V
VCC8V
VCC18V
VCC8V
VDCM12V
SWVDD25V
SWVDD33V
GDC1.2V
GDC33V
PWRFL
PWRVI
ILMV
FU5001 3216/501 MAX2.0A
FU5501 CEK1283 1.75 A
IC5006 BD6171KV
IC5005 BA00CC0WFP
IC5003
IC5004
IC5502 TC7SET08FU1
IC5503 OZ961ISN
IC5403 CPLD PE1023A
IC5402 TC7SHU04FU1
X5401 CSS1702 33.231MHz
CN5601
CN5602
CN5604
CN5603 CN5605
A2/2 CN572
A2/2 CN571
A2/2 CN571
G2/2
MVIPW
INVPUL
DIMDTY
YSOUT
PSCK
OSDBLNK
(L:BLNK)

G 1/2

G-b 1/2


LCD MODULE
CN5501
G 1/2 MONITOR UNIT(MONITOR)
G 2/2
G 2/2
IC5502
TC7SET08FUS1
IC5503
OZ961ISN
IC5504
SI6544BDQ
IC5505
SI6544BDQ
T5501
VR5501
CCP1490
D5507
D5508
MA143
FL1
FL2
GNDFL
INVBST
IC5301
TC7SET04FUS1
IC5302
TC74VHC04FTS1
LCDGND
3.3V=55mA
2.5V=128mA
1.5V=127mA
IC5102
TC90A96BFGSING
RGB 8bit Digital I/F
RGB 6/8bit Digital Out
(6bitLSB)
(6bitLSB)
(6bitLSB)
POWER
1.5V→V15
2.5V→V25
3.3V→V31~34
5.0V→V5
8.0V→V8
18V→V18
-12V→VM12
LCD MODULE
CN5301
VCOMAMP
IC5202
TC7SET04FUS1
IC5203
NJM2100V
IC5201
NJW5210RB1
IC5204
TC7566FU
IC5205
NJM2903V
Q5201
2SA1774
Q5202
2SC4617
Q5203
2SA1774
Q5204
2SC4617
-4.6dB
2016/10u MAX155mA
(L:BLNK)
H+VGA
RMGND
DGND
POWER 5001-5100
P IN P 5101-5200
VCOMAMP 5201-5300
TO MONITOR 5301-5400
CPLD 5401-5500
INVERTOR 5501-5600
OTHERS 5601-
CTF1306 BK1608HM102
CTF1528 BK1005HM102
Ta B2 MAXH=2.1

A

B

C

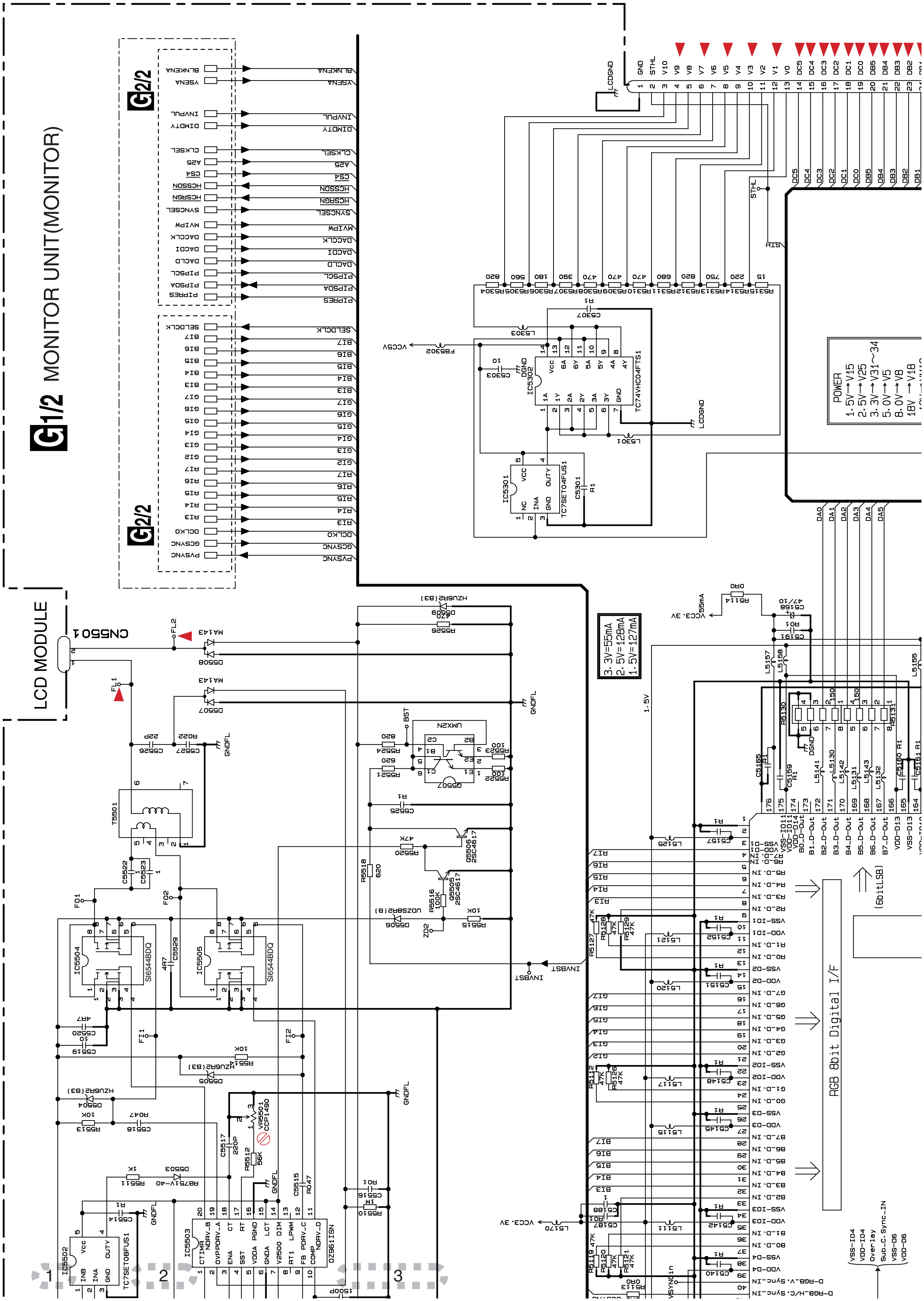
D

E

F

G 1/2

G-a G-b


A
B
C
D
E
F
G1/2 MONITOR UNIT(MONITOR)
G2/2
LCD MODULE
CN5501
IC5301
TC7SET04FUS1
IC5302
TC74VHC04FTS1
IC5502
TC7SET08FUS1
IC5503
OZ961ISN
IC5504
SI6544BDQ
IC5505
SI6544BDQ
T5501
Q5506
2SC4617
Q5505
2SC4617
Q5507
UMX2N
VR5501
CCP1450
VCC5V
VCC3.3V
LCDGND
GNDFL
INVBST
BST
D5508
D5507
MA143
D5509
HZU6R2(B3)
D5506
UDZS8R2(B)
D5505
D5504
D5503
RB751V-40
FL1
FL2
FO1
FO2
FI1
FI2
3.3V=55mA
2.5V=128mA
1.5V=127mA
1.5V
POWER
1.5V→V15
2.5V→V25
3.3V→V31~34
5.0V→V5
8.0V→V8
18V →V18
RGB 8bit Digital I/F
(6bitLSB)
D-RGB-V.Sync-IN
D-RGB-H/C.Sync-IN
VSYNCin
VSS-IO4
VDD-IO4
Overlay
Sub_C.Sync_IN
VSS-D6
VDD-D6
BLNKENA
YSENA
INVPUL
DIMDTY
CLKSEL
A25
CS4
HCSSDN
HCSRGN
SYNCSEL
MVIPW
DACCLK
DACDI
DACLD
PIPSCL
PIPSDA
PIPRES
SELDCLK
DCLKO
GCSYNC
PVSYNC
B17
B16
B15
B14
B13
G17
G16
G15
G14
G13
G12
R17
R16
R15
R14
R13
STHL
DC5
DC4
DC3
DC2
DC1
DC0
DB5
DB4
DB3
DB2
DB1
DA0
DA1
DA2
DA3
DA4
DA5
GND
V10
V9
V8
V7
V6
V5
V4
V3
V2
V1
V0

A

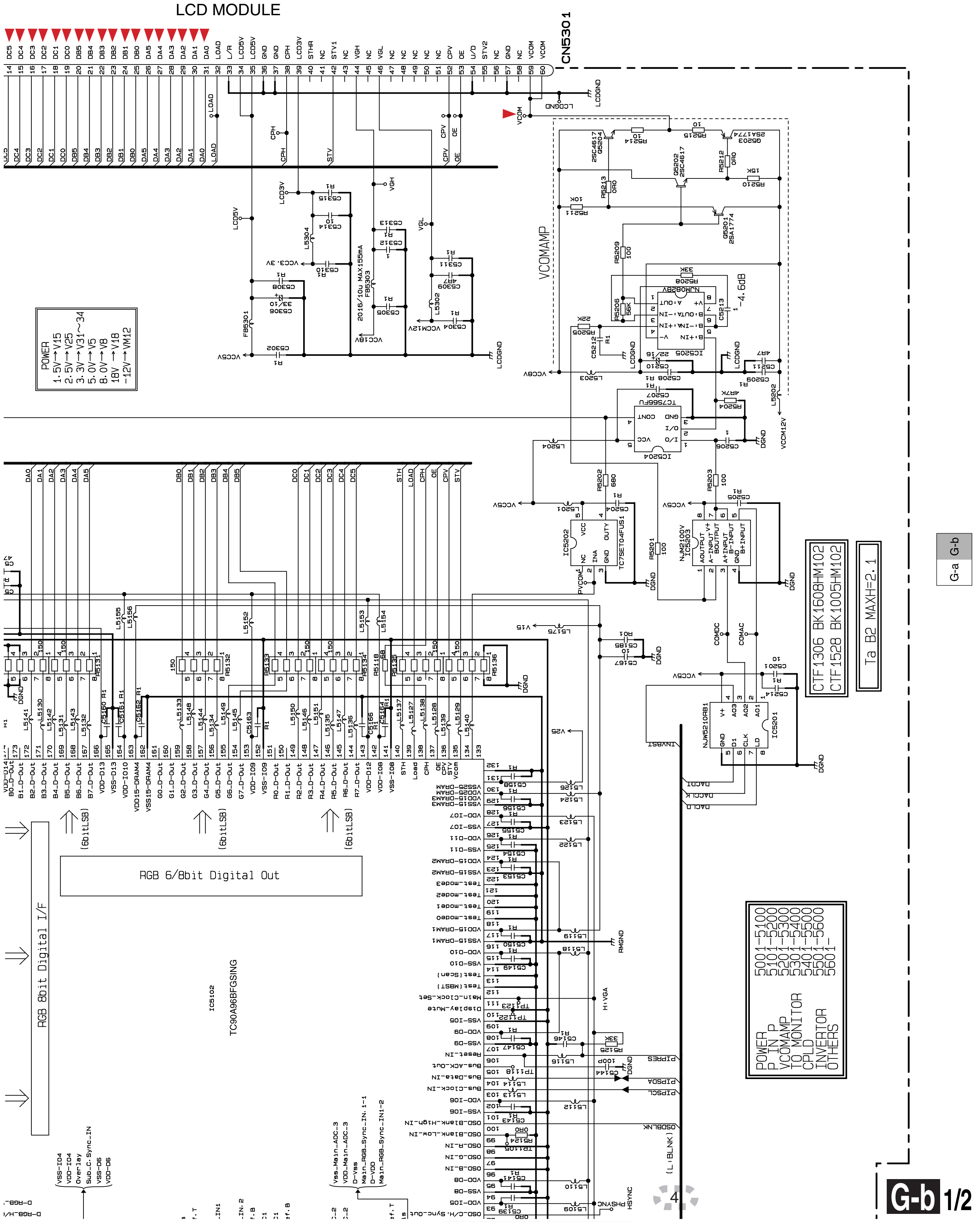
B

C

D

E

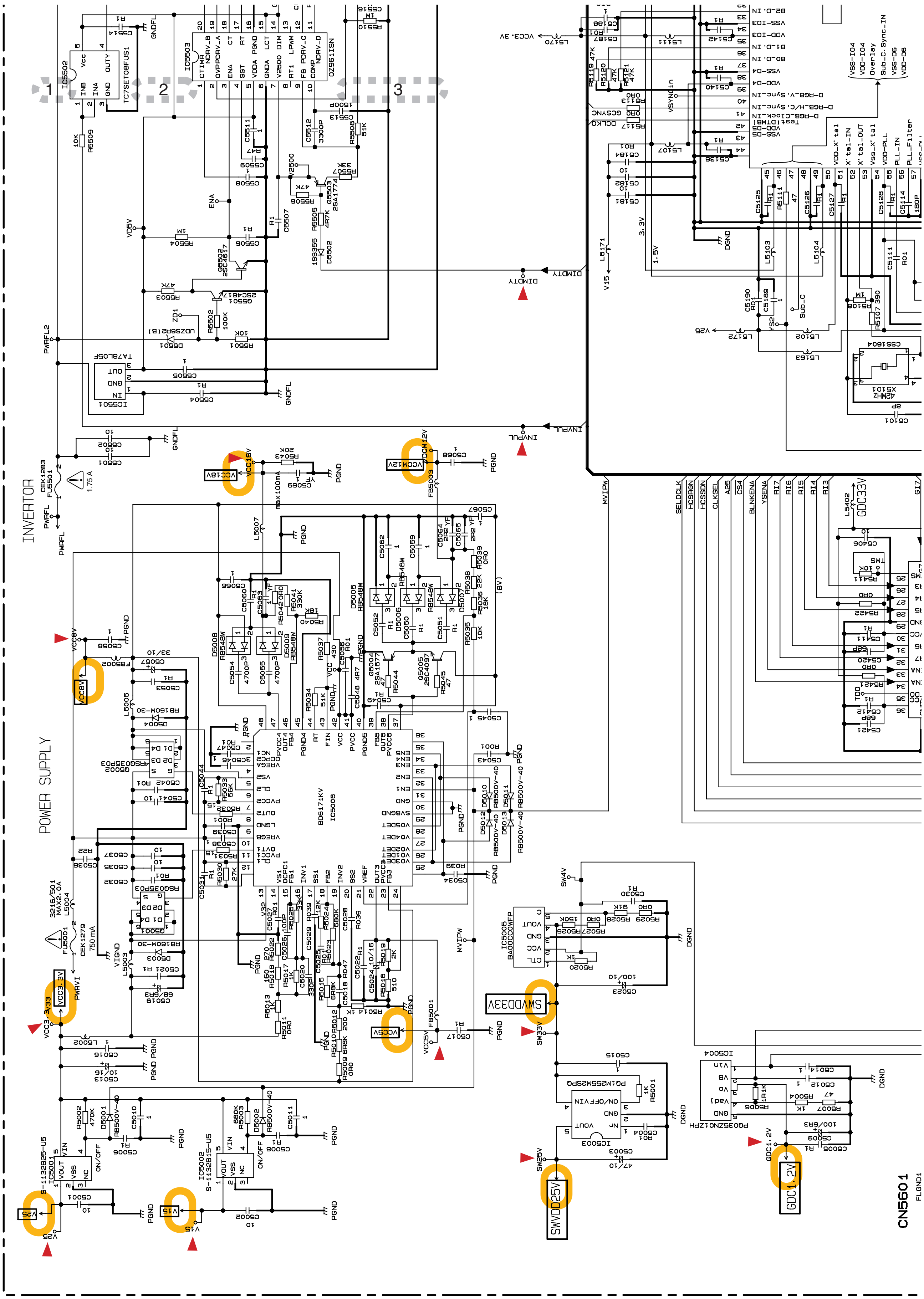
F


LCD MODULE
CN5301
VCOMAMP
IC5102
TC90A96BFGSING
RGB 8bit Digital I/F
RGB 6/8bit Digital Out
(6bitLSB)
POWER
1.5V→V15
2.5V→V25
3.3V→V31~34
5.0V→V5
8.0V→V8
18V →V18
-12V→VM12
CTF1306 BK1608HM102
CTF1528 BK1005HM102
Ta B2 MAXH=2.1
POWER 5001-5100
P IN P 5101-5200
VCOMAMP 5201-5300
TO MONITOR 5301-5400
CPLD 5401-5500
INVERTOR 5501-5600
OTHERS 5601-
IC5201
NJW5210RB1
IC5203
NJM2100V
IC5202
TC7SET04FUS1
IC5204
TC7S66FU
IC5205
NJM082BV
Q5201 2SA1774
Q5202 2SC4617
Q5203 2SA1774
Q5204 2SC4617
-4.6dB
LCDGND
DGND
RMGND
VCOM
VCC5V
VCC8V
VCC18V
VCCM12V
VCC3.3V
LCD3V
LCD5V
2016/10u MAX155mA
FB5303
FB5301

G-a G-b

G-b 1/2

G-b 1/2



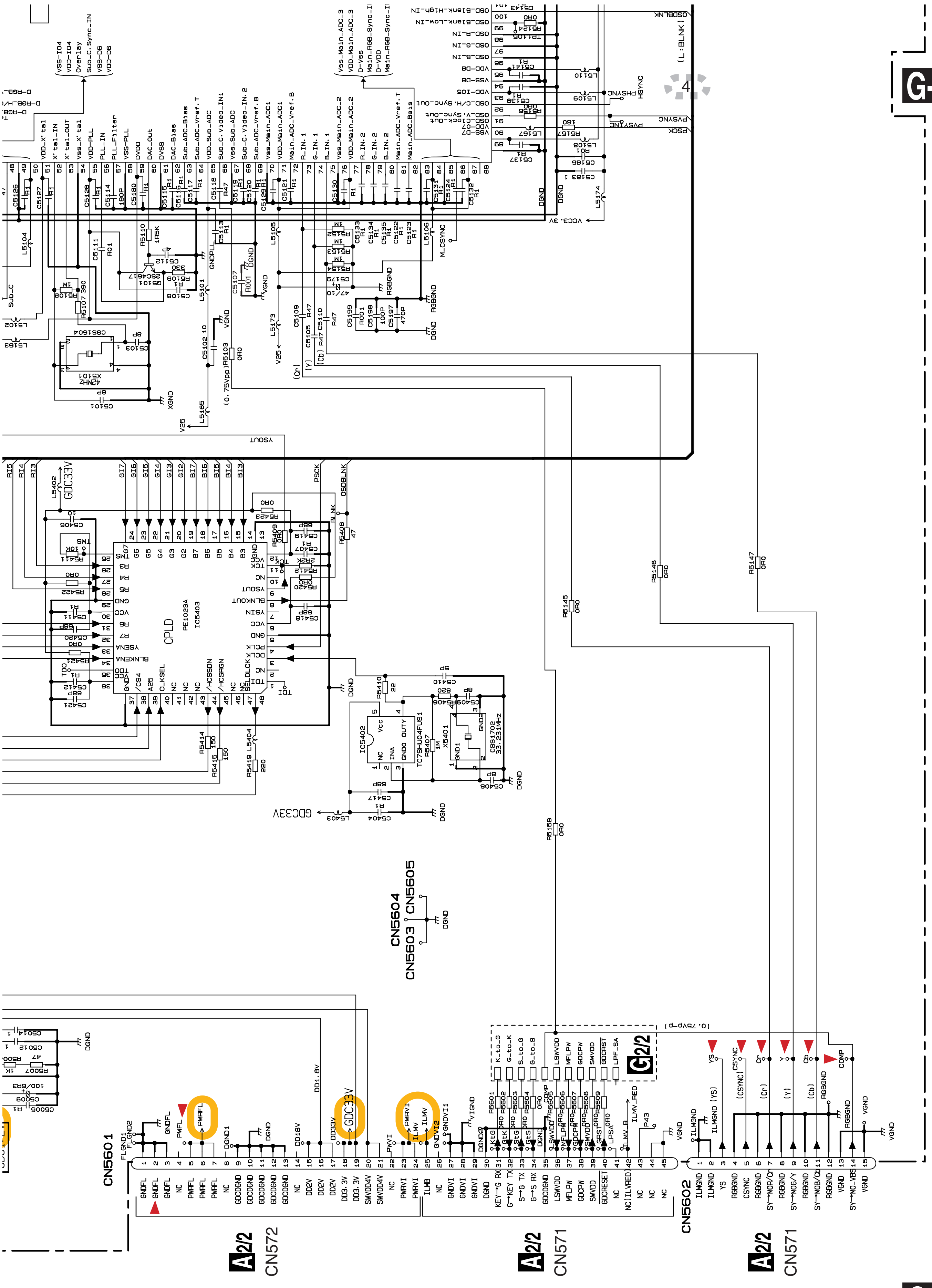
1
2
3
4
A
B
C
D
E
F
INVERTOR
POWER SUPPLY
IC5501 TA78L05F
IC5502 TC7SET08FUS1
IC5503 OZ961ISN
IC5506 BD6171KV
IC5001 S-1132B25-U5
IC5002 S-1132B15-U5
IC5003 PQ1M255M2SPQ
IC5004 PQ035ZN01ZPH
IC5005 BA00CC0WFP
CN5601
FU5501 CEK1283 1.75 A
FU5001 CEK1279 750 mA
L5004 3216/501 MAX2.0A
VCC3.3V
VCC8V
VCC18V
VCCM12V
VCC5V
SWVDD33V
SWVDD25V
V25
V15
GDC1.2V
GDC33V
DIMDTY
INVPUL
PWRFL
PWRFL2
VD5V
MVIPW
VCC3.3V
GNDFL
PGND
DGND

G-a 1/2

G-a G-b

A

G-b 1/2


CN5601
CN5602
CN5603 CN5604 CN5605
A 2/2 CN572
A 2/2 CN571
A 2/2 CN571
G 2/2
CPLD
PE1023A
IC5403
IC5402
TC7SHU04FUS1
X5401
CSS1702 33.231MHz
X5101 42MHz
CSS1604
Q5101 2SC4617
GDC33V
YSOUT
PSCK
OSDBLNK
PVSYNC
PHSYNC
HSYNC
(L:BLNK)
VCC3.3V
DGND
RGBGND
VGND
XGND
V25
(0.75Vpp)
(Cr)
(Y)
(Cb)
GNDFL
PWRFL
DD33V
DD3.3V
PWRVI
ILMV
ILMB
GNDVI
KEY→G RX
G→KEY TX
S→G TX
G→S RX
LSWVDD
MFLPW
GDCPW
SWVDD
GDCRESET
ILMGND
YS
CSYNC
SY→MOR/Cr
SY→MOG/Y
SY→MOB/Cb
SY→MO_VBS
COMP

B

C

D

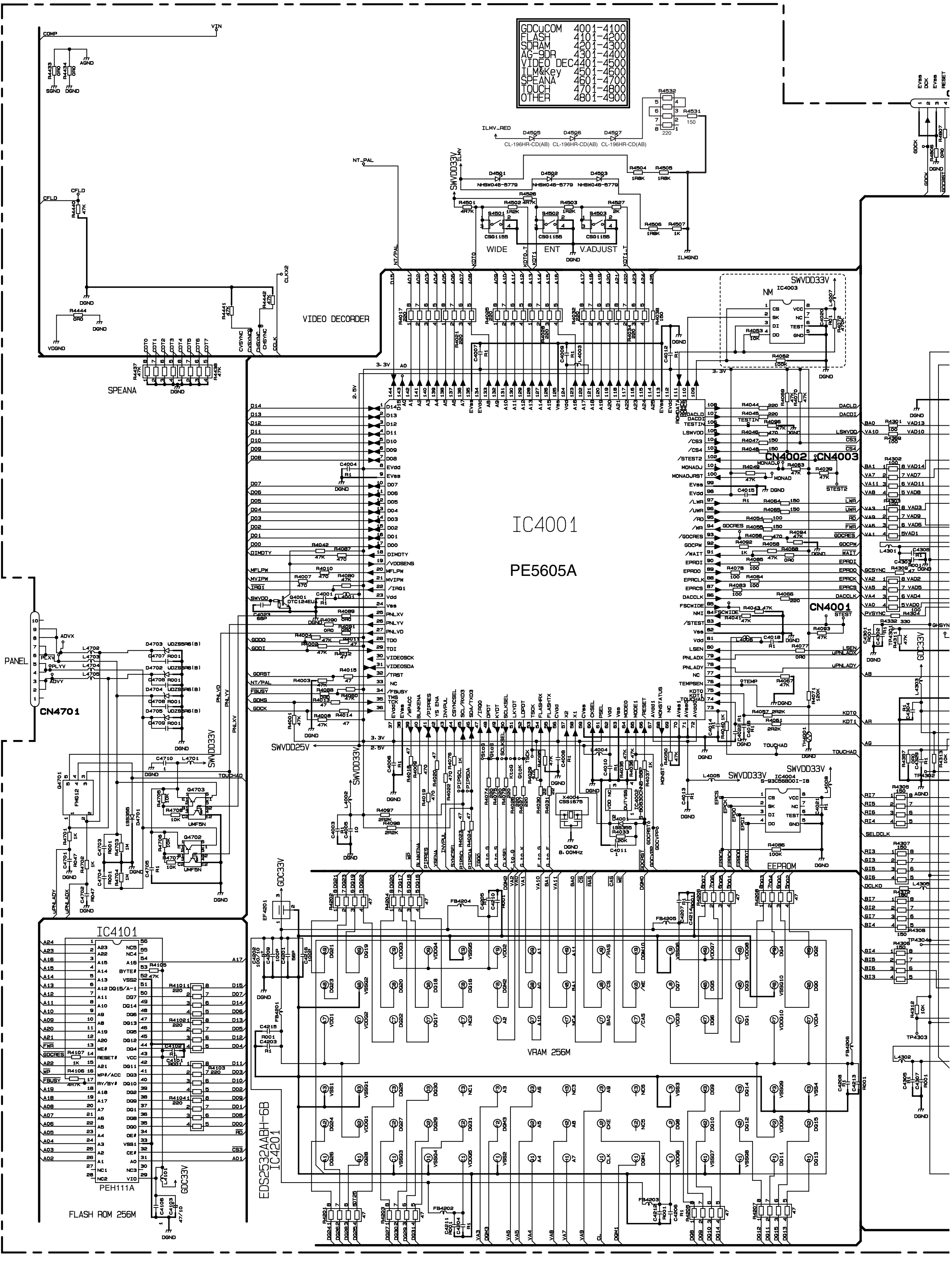
E

F

G-a 1/2

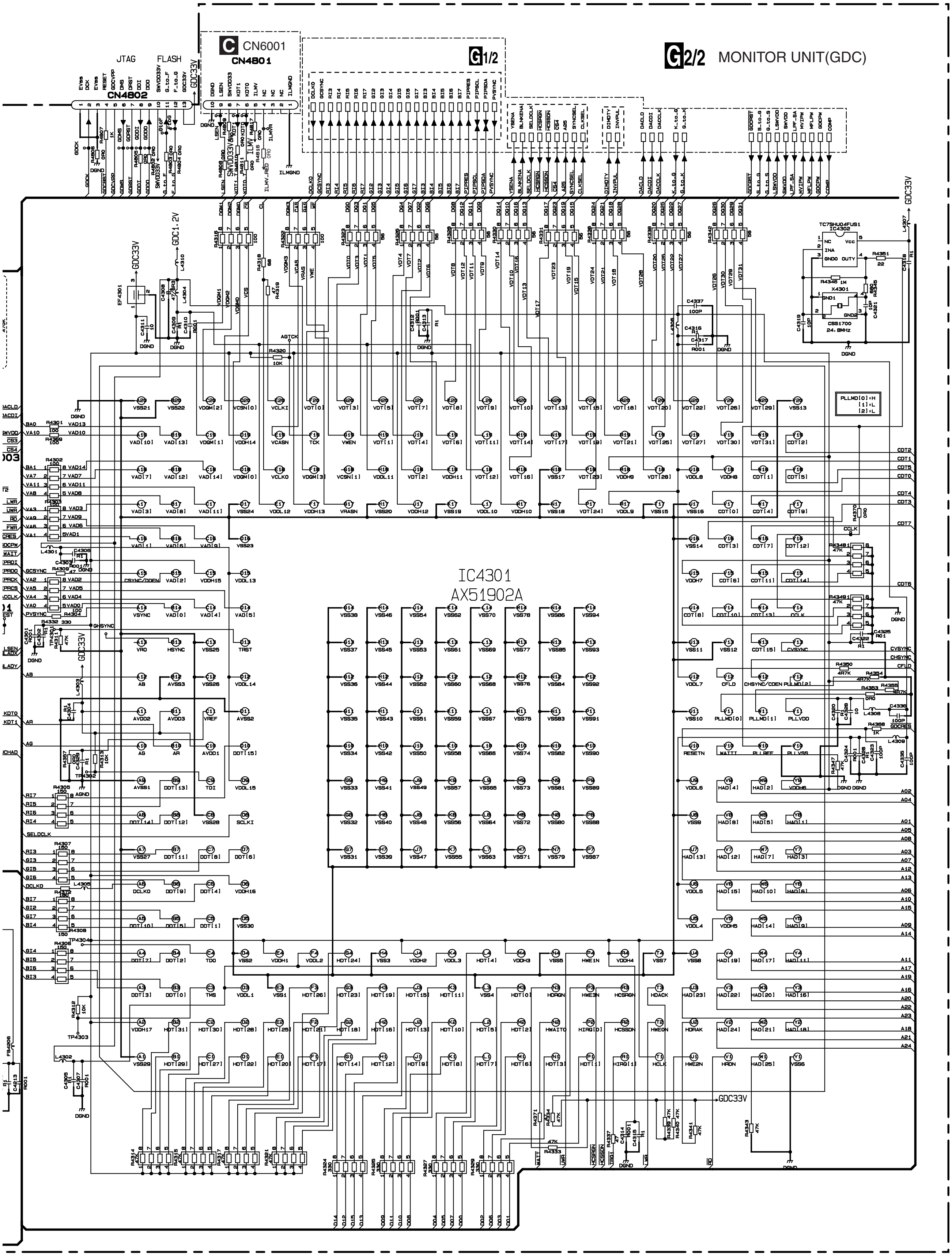
10.9 MONITOR UNIT(GDC)(GUIDE PAGE)

G-a 2/2


GDCuCOM 4001-4100
FLASH 4101-4200
SDRAM 4201-4300
AG-9DR 4301-4400
VIDEO DEC 4401-4500
ILM&Key 4501-4600
SPEANA 4601-4700
TOUCH 4701-4800
OTHER 4801-4900
IC4001
PE5605A
IC4101
PEH111A
FLASH ROM 256M
IC4201
EDS2532AABH-6B
VRAM 256M
IC4003
IC4004
S-93C56BD0I-I8
EEPROM
VIDEO DECORDER
SPEANA
TOUCH PANEL
CN4701
CN4001
CN4002
CN4003
WIDE
ENT
V.ADJUST
S4501
S4502
S4503
CSG1155
D4501
D4502
D4503
NHSW046-5779
D4505
D4506
D4507
CL-196HR-CD(AB)
ILMV_RED
SWVDD33V
SWVDD25V
GDC33V
DGND
AGND
ILMGND
X4001
CSS1575
8.00MHz
Q4001
DTC124EU
Q4701
FMG12
Q4702
Q4703
UMF5N
NT_PAL
COMP
VIN
CFLD
CLKX2
TOUCHAD

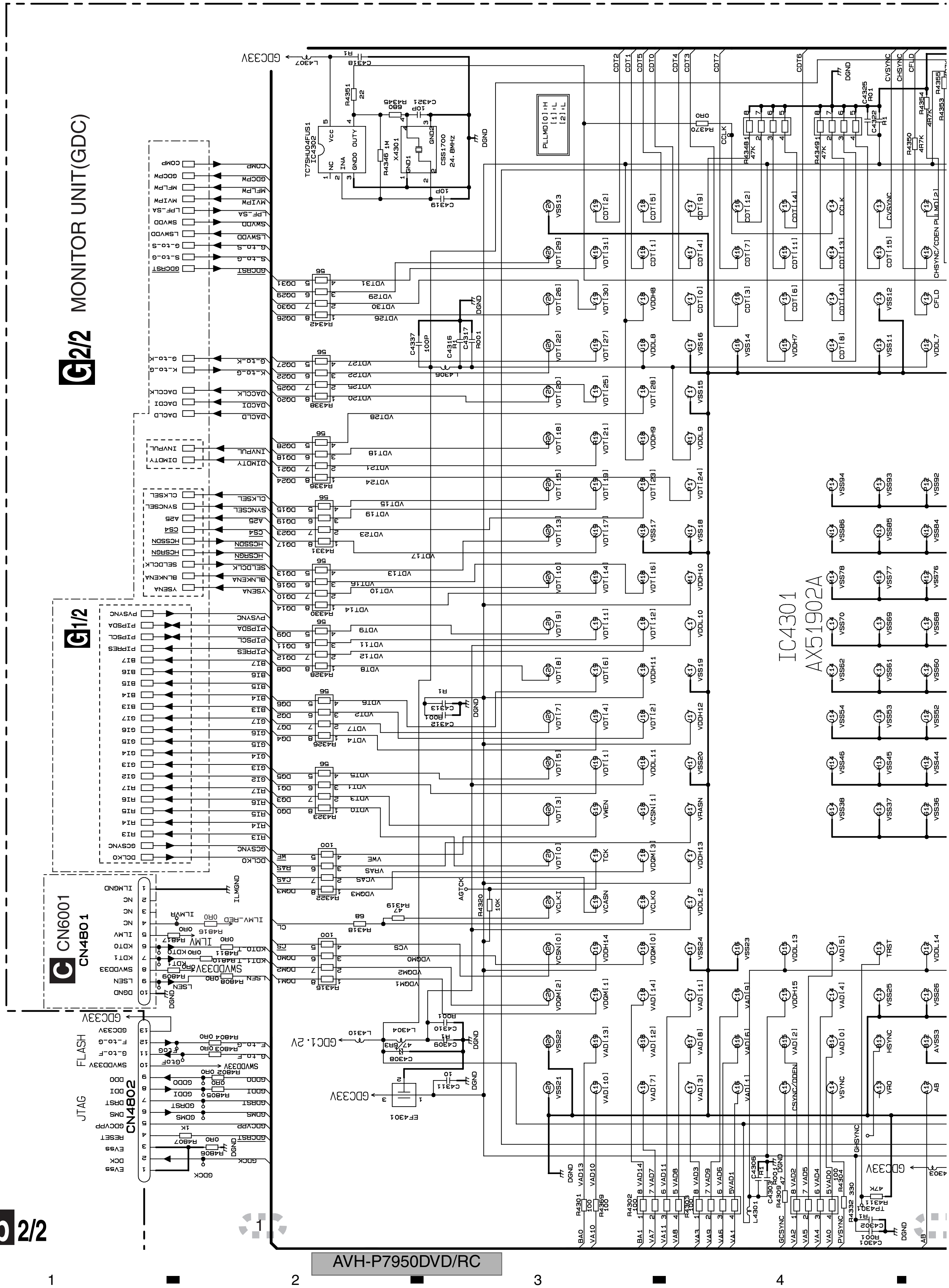
G 2/2

G-b 2/2



G 2/2 MONITOR UNIT(GDC)
C CN6001
CN4801
CN4802
JTAG
FLASH
G 1/2
IC4301
AX51902A
TC7SHU04FUS1
IC4302
X4301
CSS1700
24.8MHz
GDC33V
GDC1.2V
DGND
AGND
ILMGND
EF4301
PLLMD[0]:H
[1]:L
[2]:L

G 2/2


G 2/2 MONITOR UNIT(GDC)
G 1/2
C CN6001 CN4B01
CN4802
FLASH
JTAG
IC4301 AX51902A
IC4302 TC7SHU04FUS1
X4301 CSS1700 24.8MHz
PLLMD[0]:H [1]:L [2]:L
GDC33V
GDC1.2V
EF4301
DGND
ILMGND
COMP
GDCPW
MFLPW
MVIPW
LPF-SA
SWVDD
LSWVDD
G-to-S
S-to-G
GDCRST
G-to-K
K-to-G
DACCLK
DACDI
DACLD
INVPUL
DIMDTY
CLKSEL
SYNCSEL
A25
CS4
HCSSDN
HCSRGN
SELDCLK
BLNKENA
VSENA
PVSYNC
PIPSDA
PIPSCL
PIPRES
BI7
BI6
BI5
BI4
BI3
GI7
GI6
GI5
GI4
GI3
GI2
RI7
RI6
RI5
RI4
RI3
GCSYNC
DCLKO
ILMV
KDT0
KDT1
SWVDD33
LSEN
F-to-G
G-to-F
SWVDD33V
GDDO
GDDI
GDRST
GDMS
GDCVPP
RESET
EVSS
GDCK

A

B

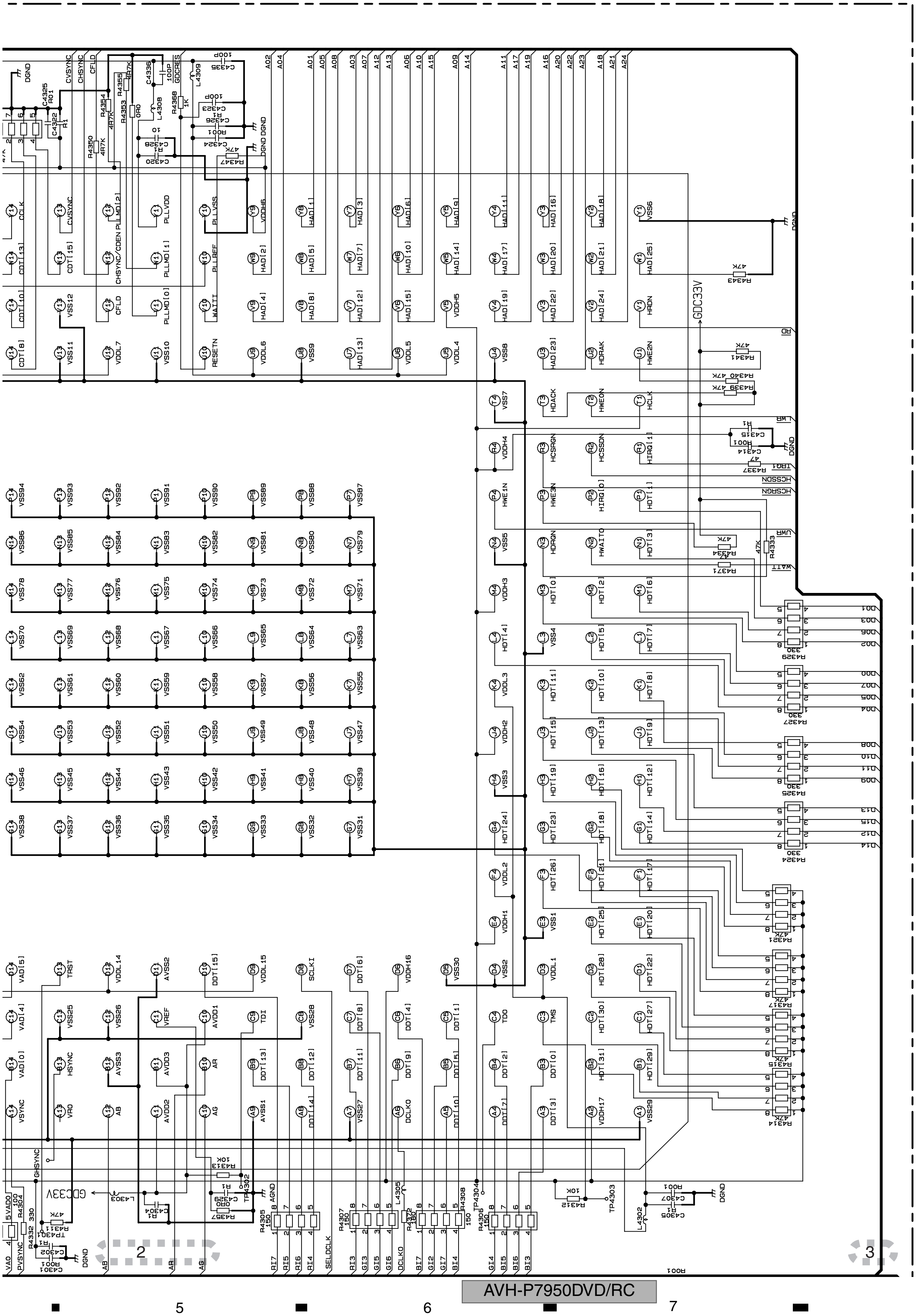
C

D

E

F

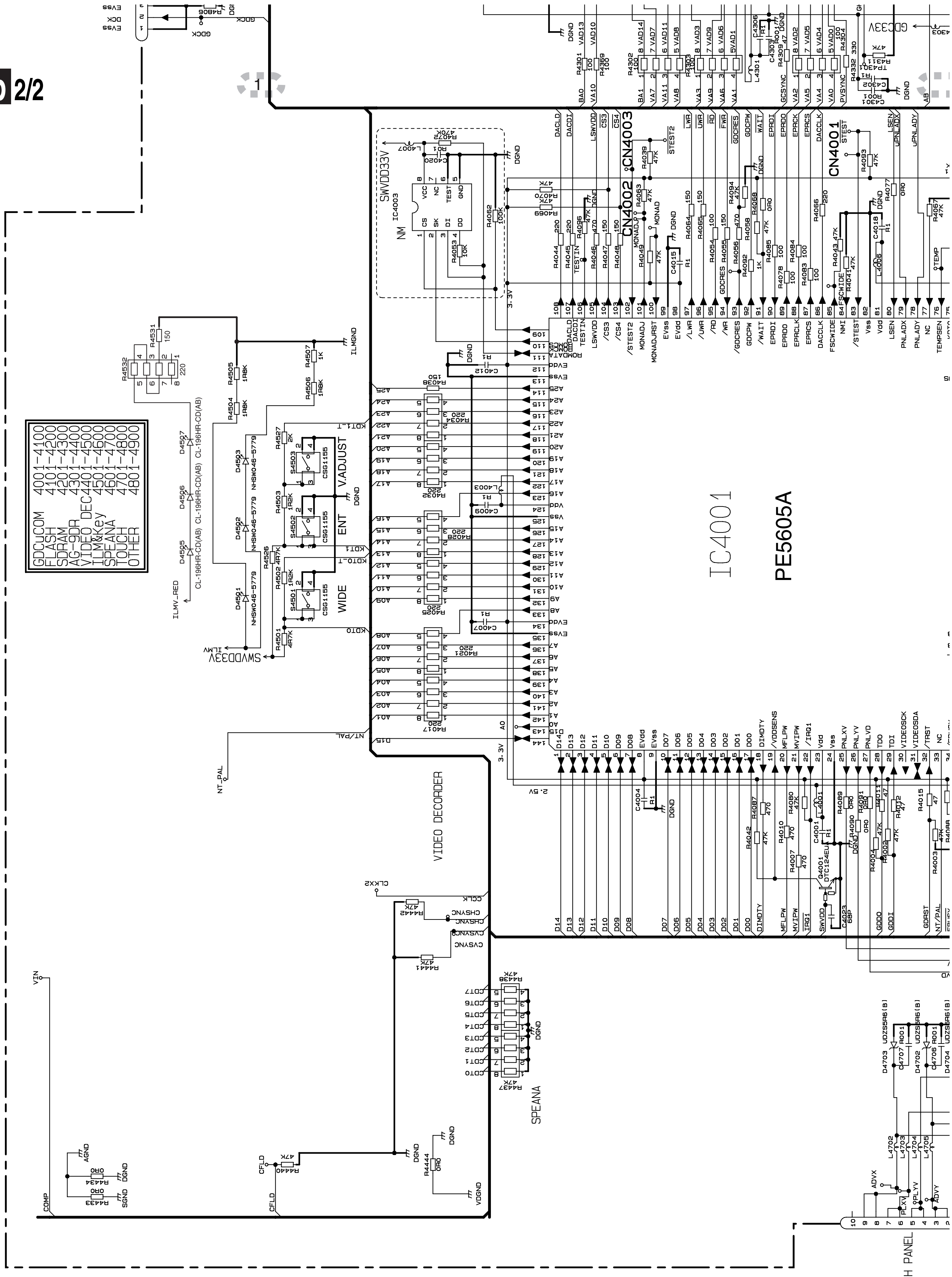
G-a G-b



DGND
CVSYNC
CHSYNC
CFLD
GDCRES
C4335 100P
C4325
C4322
R4350 4R7K
R4354 4R7K
R4353
R4355 4R7K
C4336 10P
L4308
R4368 1K
L4309
C4323 100P
C4326
C4324
C4328
C4320
R4347 47K
CCLK
CVSYNC
CHSYNC/CDEN PLLMD[2]
PLLVDD
PLLVSS
VDDH6
CDT[13]
CDT[15]
PLLMD[1]
PLLREF
CDT[10]
VSS12
CFLD
PLLMD[0]
WAIT1
CDT[8]
VSS11
VDDL7
VSS10
RESETN
VDDL6
VSS9
VDDL5
VDDL4
VSS8
HDRAK
HWE2N
HRDN
VSS6
R4343 47K
GDC33V
R4341 47K
R4340 47K
R4339 47K
HDACK
HWE0N
HCLK
VSS7
VDDH4
HCSRGN
HCSSDN
HIRQ[1]
C4315
C4314
R4337 47
HWE1N
HWE3N
HIRQ[0]
HDT[1]
VSS5
HDRDN
HWAIT0
HDT[3]
R4334 47K
R4333 47K
R4371
VDDH3
HDT[0]
HDT[2]
HDT[6]
R4329 330
R4327 330
R4325 330
R4324 330
R4321 47K
R4317 47K
R4315 47K
R4314 47K
D01 D03 D06 D02
D00 D07 D05 D04
D08 D10 D11 D09
D13 D15 D12 D14
RD
LWR
UWR
WAIT
IRQ1
HCSSDN
HCSRGN
VSS94 VSS93 VSS92 VSS91 VSS90 VSS89 VSS88 VSS87
VSS86 VSS85 VSS84 VSS83 VSS82 VSS81 VSS80 VSS79
VSS78 VSS77 VSS76 VSS75 VSS74 VSS73 VSS72 VSS71
VSS70 VSS69 VSS68 VSS67 VSS66 VSS65 VSS64 VSS63
VSS62 VSS61 VSS60 VSS59 VSS58 VSS57 VSS56 VSS55
VSS54 VSS53 VSS52 VSS51 VSS50 VSS49 VSS48 VSS47
VSS46 VSS45 VSS44 VSS43 VSS42 VSS41 VSS40 VSS39
VSS38 VSS37 VSS36 VSS35 VSS34 VSS33 VSS32 VSS31
VAD[5] TRST VDDL14 AVSS2 DDT[15] VDDL15 SCLKI DDT[6] VDDH16 VSS30 VSS2 VDDL1
VAD[4] VSS25 VSS26 VREF AVDD1 TDI VSS28 DDT[8] DDT[4] DDT[1] TDO TMS
VAD[0] HSYNC AVSS3 AVDD3 AR DDT[13] DDT[12] DDT[11] DDT[9] DDT[5] DDT[2] DDT[0]
VSYNC VR0 AB AVDD2 AG AVSS1 DDT[14] VSS27 DCLKO DDT[10] DDT[7] DDT[3] VDDH17 VSS29
GHSYNC
R4313 10K
GDC33V
L4303
C4304
C4329
R4357
TP4302
R4304 100
R4332 330
R4311 47K
TP4301
C4302
C4301
R4305 150
R4307 150
L4305
R4312
R4308 150
TP4304
R4306 150
R4312 10K
TP4303
L4302
C4307
C4305
DGND
5VADD
PVSYNC
VA0
AB
AR
AG
RI7 RI5 RI6 RI4
SELDCLK
RI3 GI3 GI5 GI6
DCLKO
BI7 GI2 GI7 BI4
GI4 BI5 BI6 BI3
2
3

G-b 2/2

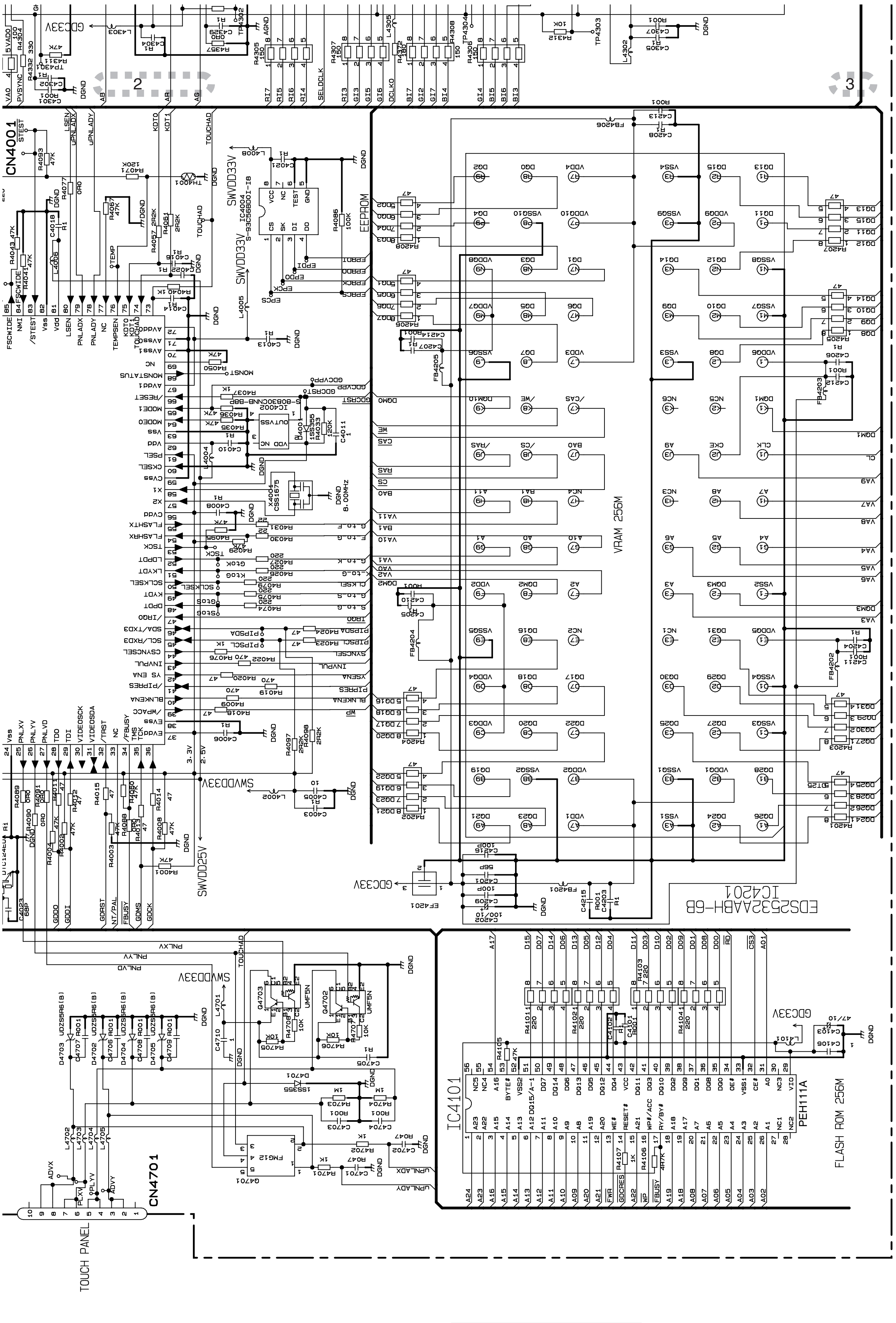
G-b 2/2


IC4001
PE5605A
CN4001
CN4002
CN4003
IC4003
NM
SWVDD33V
GDC33V
VIDEO DECORDER
V.ADJUST
ENT
WIDE
SPEANA
TOUCH PANEL
SWVDD33V
ILMV
ILMV_RED
ILMGND
NT_PAL
CLKX2
CFLD
COMP
VIN
AGND
SGND
DGND
VDGND
3.3V
2.5V
GDCuCOM 4001-4100
FLASH 4101-4200
SDRAM 4201-4300
AG-9DR 4301-4400
VIDEO DEC4401-4500
ILM&Key 4501-4600
SPEANA 4601-4700
TOUCH 4701-4800
OTHER 4801-4900

G-a G-b

G-a 2/2

G-b 2/2

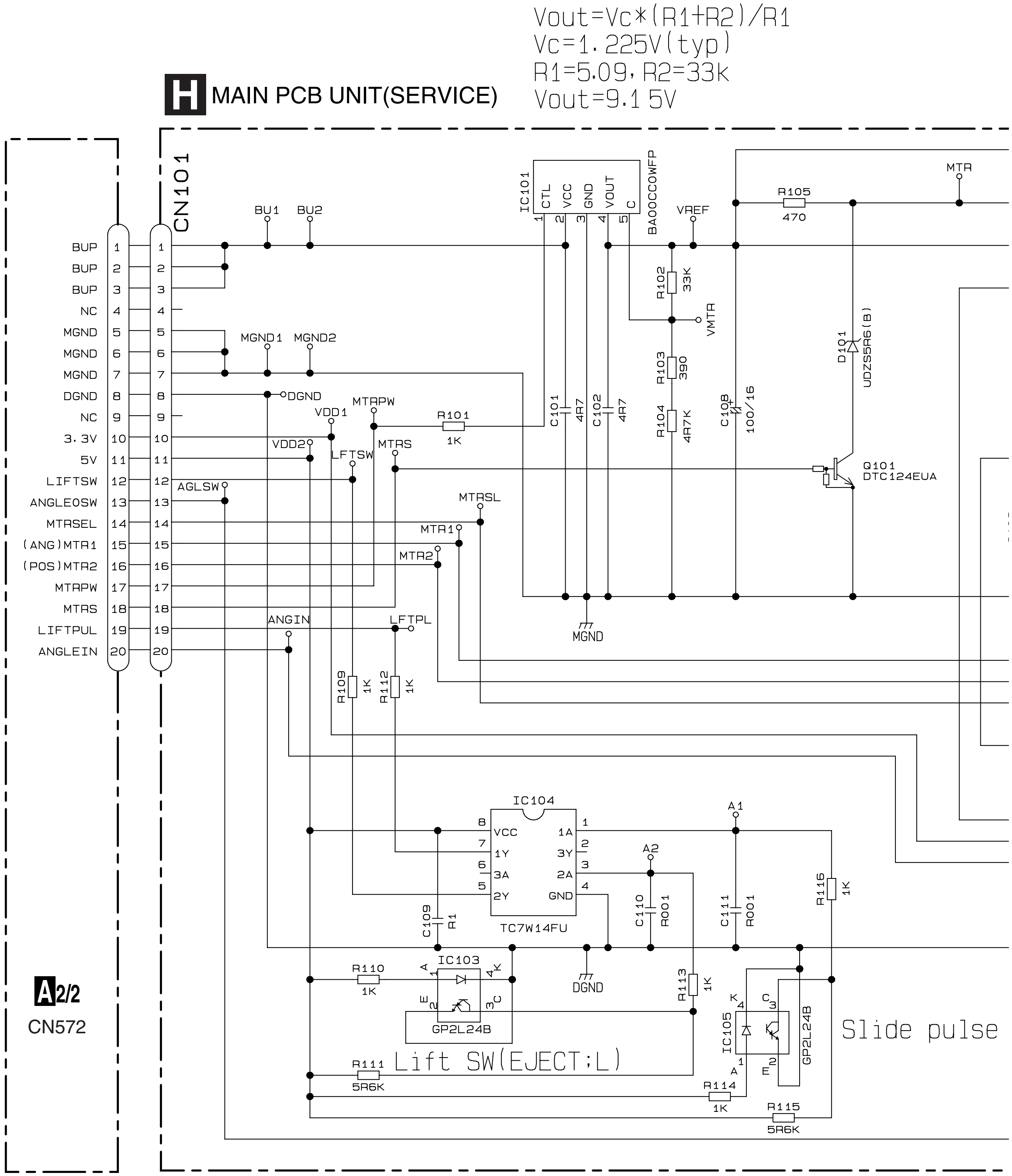

CN4001
IC4004 S-93C56BDOI-I8
EEPROM
SWVDD33V
SWVDD25V
IC4002 S-80830CNNB-B8P
X4004 CSS1675 8.00MHz
VRAM 256M
IC4201 EDS2532AABH-6B
IC4101 PEH111A FLASH ROM 256M
GDC33V
DGND
Q4701 FMG12
Q4702 UMF5N
Q4703 UMF5N
D4701 1SS355
CN4701
TOUCH PANEL
2
3

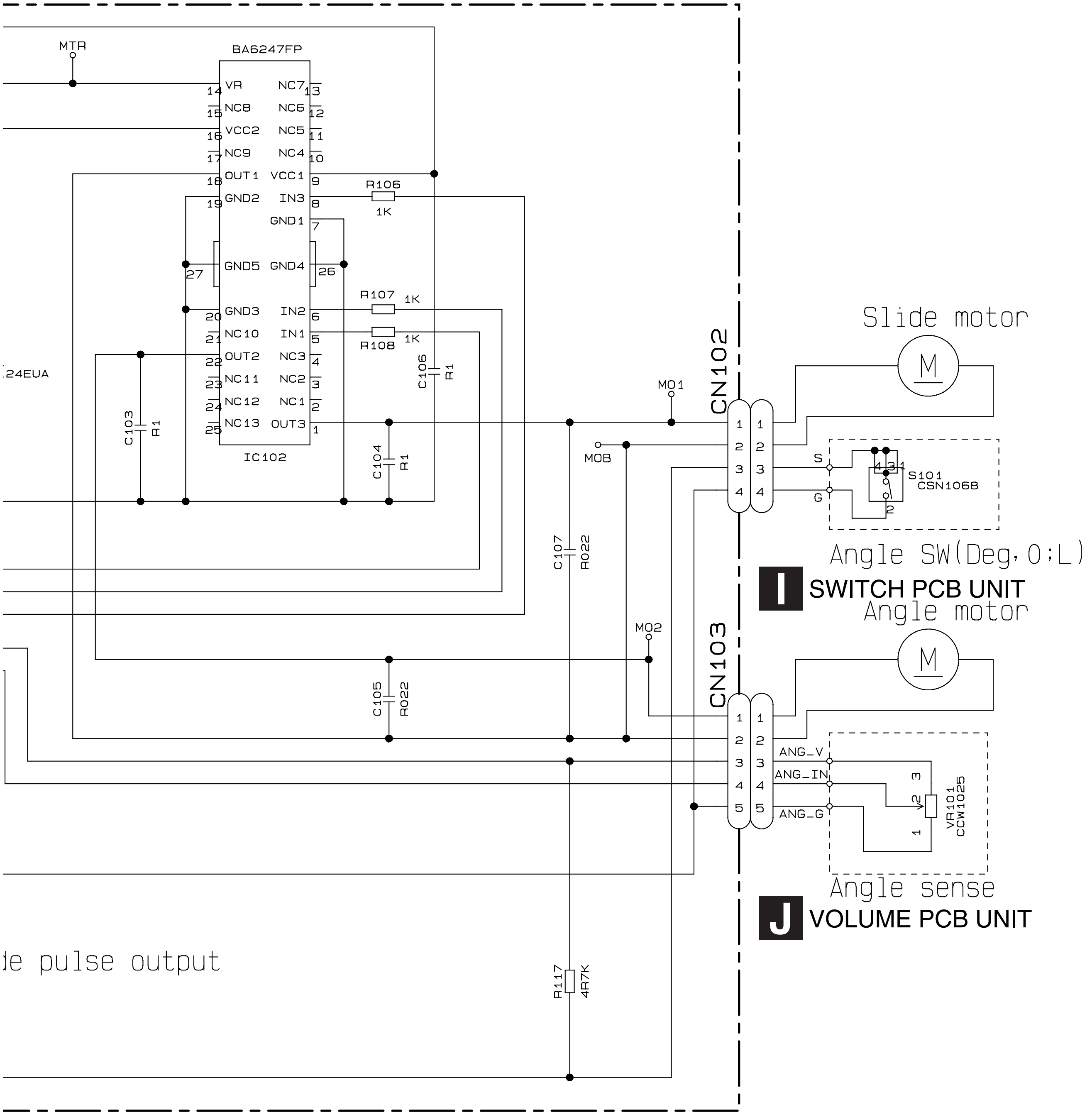
A B C D E F

G-a G-b

G-a 2/2

10.10 DRIVE UNIT

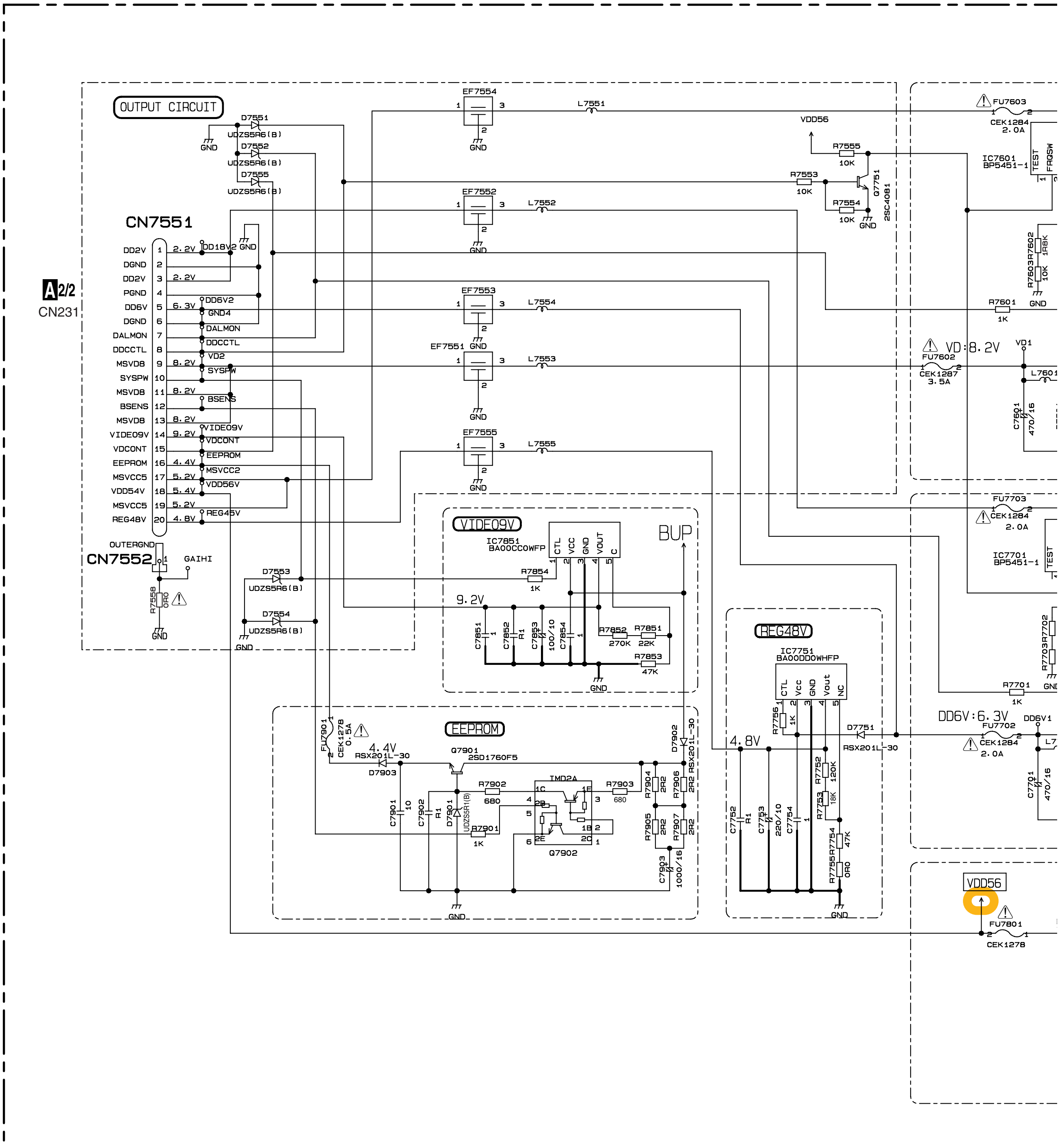

Vout=Vc*(R1+R2)/R1
Vc=1.225V(typ)
R1=5.09, R2=33k
Vout=9.15V
H MAIN PCB UNIT(SERVICE)
CN101
BUP 1
BUP 2
BUP 3
NC 4
MGND 5
MGND 6
MGND 7
DGND 8
NC 9
3.3V 10
5V 11
LIFTSW 12
ANGLEOSW 13
MTRSEL 14
(ANG)MTR1 15
(POS)MTR2 16
MTRPW 17
MTRS 18
LIFTPUL 19
ANGLEIN 20
BU1
BU2
MGND1
MGND2
DGND
VDD1
VDD2
MTRPW
LFTSW
MTRS
AGLSW
MTRSL
MTR1
MTR2
ANGIN
LFTPL
IC101
BA00CC0WFP
1 CTL
2 VCC
3 GND
4 VOUT
5 C
VREF
VMTR
R101 1K
R102 33K
R103 390
R104 4R7K
R105 470
C101 4R7
C102 4R7
C108 100/16
D101 UDZS5R6(B)
Q101 DTC124EUA
MTR
MGND
R109 1K
R112 1K
IC104
TC7W14FU
8 VCC
7 1Y
6 3A
5 2Y
1 1A
2 3Y
3 2A
4 GND
A1
A2
C109 R1
C110 R001
C111 R001
R116 1K
IC103
GP2L24B
R110 1K
DGND
R113 1K
IC105
GP2L24B
Slide pulse
R111 5R6K
Lift SW(EJECT;L)
R114 1K
R115 5R6K
A 2/2
CN572



MTR
BA6247FP
VR
NC8
VCC2
NC9
OUT1
GND2
GND5
GND3
NC10
OUT2
NC11
NC12
NC13
NC7
NC6
NC5
NC4
VCC1
IN3
GND1
GND4
IN2
IN1
NC3
NC2
NC1
OUT3
IC102
R106
1K
R107
1K
R108
1K
C106
R1
C103
R1
C104
R1
.24EUA
MO1
MOB
MO2
C107
R022
C105
R022
R117
4R7K
CN102
CN103
Slide motor
M
S
G
S101
CSN1068
Angle SW(Deg,0;L)
I
SWITCH PCB UNIT
Angle motor
M
ANG_V
ANG_IN
ANG_G
VR101
CCW1025
Angle sense
J
VOLUME PCB UNIT
de pulse output

10.11 POWER SUPPLY UNIT(GUIDE PAGE)

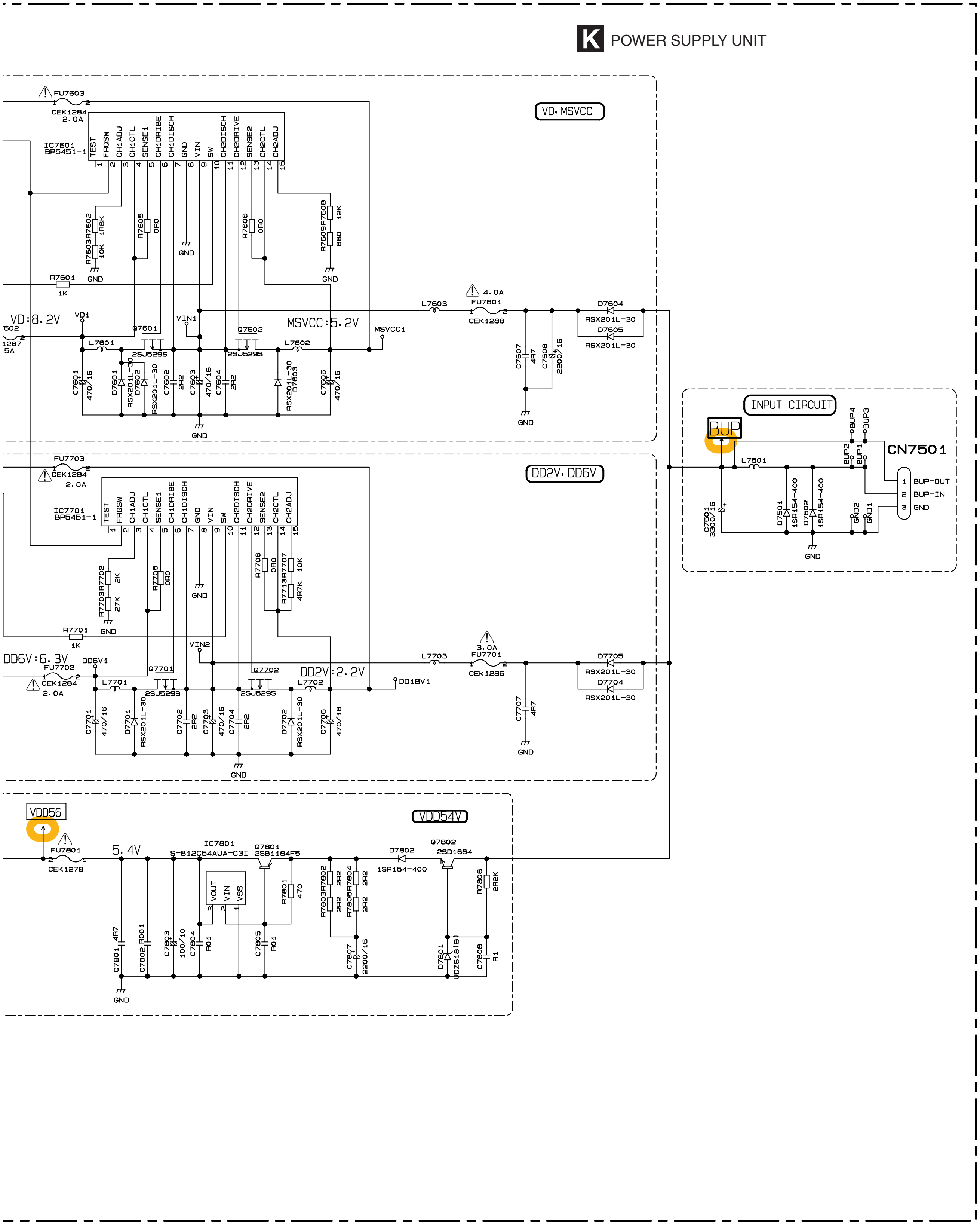
K-a


OUTPUT CIRCUIT
CN7551
A 2/2
CN231
DD2V 1 2.2V DD18V2
DGND 2
DD2V 3 2.2V
PGND 4
DD6V 5 6.3V DD6V2
DGND 6 GND4
DALMON 7 DALMON
DDCCTL 8 DDCCTL
MSVD8 9 8.2V VD2
SYSPW 10 SYSPW
MSVD8 11 8.2V
BSENS 12 BSENS
MSVD8 13 8.2V
VIDEO9V 14 9.2V VIDEO9V
VDCONT 15 VDCONT
EEPROM 16 4.4V EEPROM
MSVCC5 17 5.2V MSVCC2
VDD54V 18 5.4V VDD56V
MSVCC5 19 5.2V
REG48V 20 4.8V REG45V
OUTERGND
CN7552
GAIHI
R7558 0R0
D7551 UDZS5R6(B)
D7552 UDZS5R6(B)
D7555 UDZS5R6(B)
D7553 UDZS5R6(B)
D7554 UDZS5R6(B)
EF7554
EF7552
EF7553
EF7551
EF7555
L7551
L7552
L7554
L7553
L7555
GND
VDD56
R7555 10K
R7553 10K
R7554 10K
Q7751 2SC4081
VIDEO9V
IC7851 BA00CC0WFP
CTL Vcc GND VOUT C
R7854 1K
9.2V
C7851 1
C7852 R1
C7853 100/10
C7854 1
R7852 270K
R7851 22K
R7853 47K
BUP
REG48V
IC7751 BA00DD0WHFP
CTL Vcc GND Vout NC
R7756 1K
R7752 120K
R7753 18K
R7755 0R0
R7754 47K
D7751 RSX201L-30
4.8V
C7752 R1
C7753 220/10
C7754 1
EEPROM
FU7901 CEK1278 0.5A
4.4V
RSX201L-30
D7903
Q7901 2SD1760F5
R7902 680
R7903 680
TMD2A
Q7902
R7901 1K
C7901 10
C7902 R1
D7901 UDZS5R1(B)
R7904 2R2
R7905 2R2
R7906 2R2
R7907 2R2
D7902 RSX201L-30
C7903 1000/16
FU7603 CEK1284 2.0A
IC7601 BP5451-1
TEST FRQSW
R7602 1R8K
R7603 10K
R7601 1K
VD:8.2V
VD1
FU7602 CEK1287 3.5A
L7601
C7601 470/16
FU7703 CEK1284 2.0A
IC7701 BP5451-1
TEST
R7702
R7703
R7701 1K
DD6V:6.3V
DD6V1
FU7702 CEK1284 2.0A
C7701 470/16
VDD56
FU7801 CEK1278

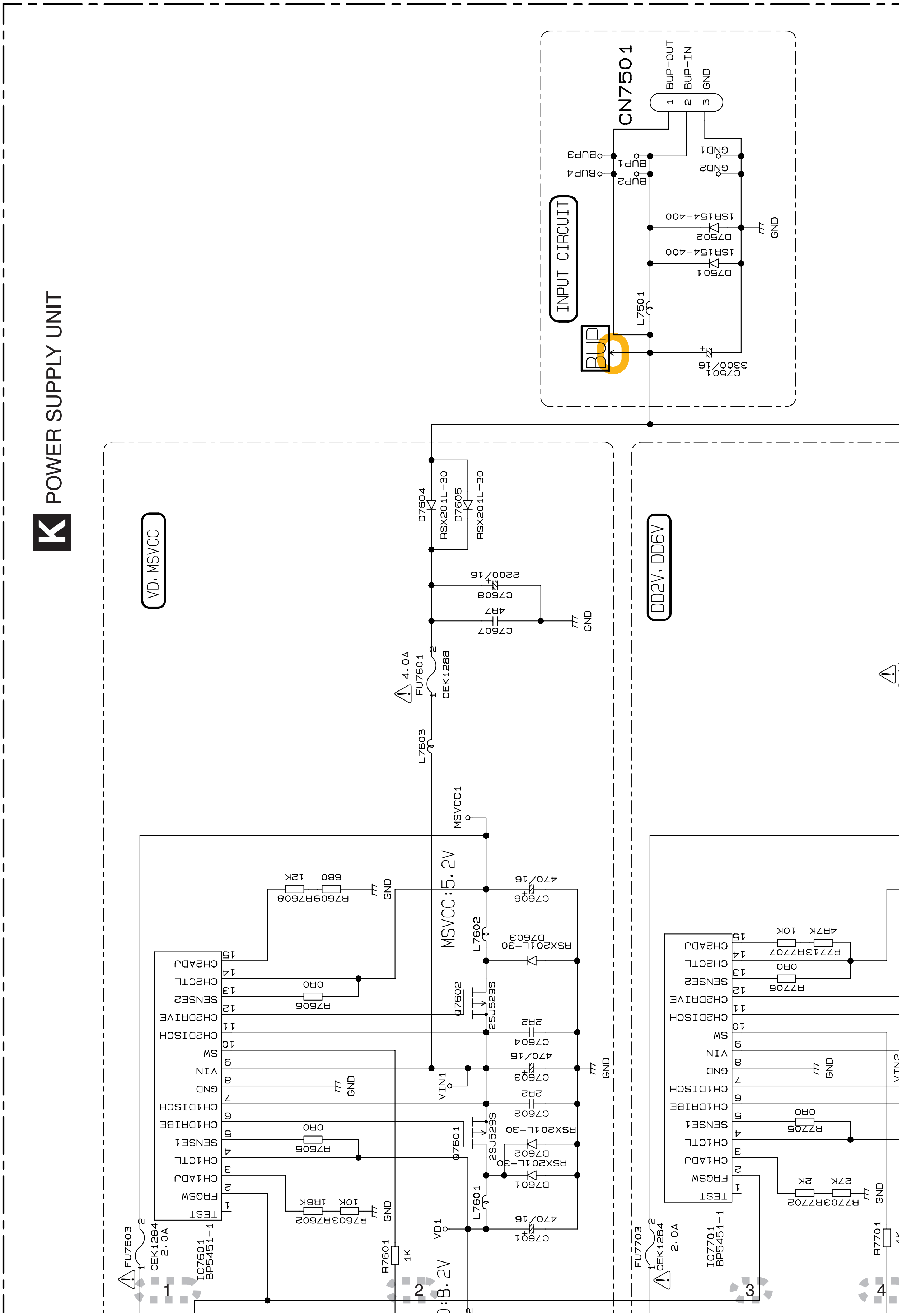
PARTS No.	CIRCUIT NAME
7501-7550	INPUT CIRCUIT
7551-7600	OUTPUT CIRCUIT
7601-7700	VD, MSVCC
7701-7750	DD6V, DD2V
7751-7800	REG48V
7801-7850	VDD54V
7851-7900	VIDEO9V
7901-7950	VD, MSVCC

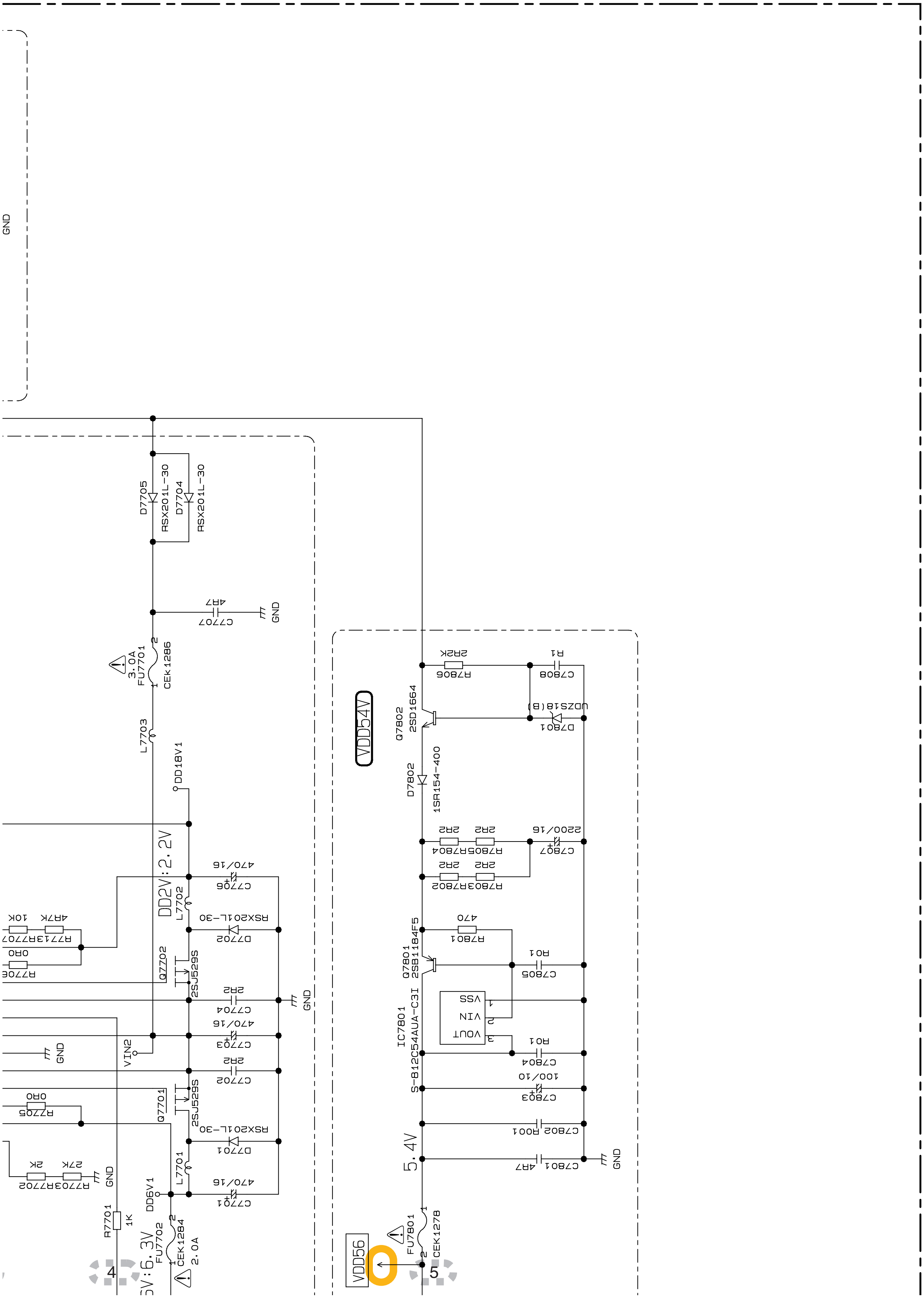
K

K-b


K POWER SUPPLY UNIT
VD, MSVCC
FU7603
CEK1284
2.0A
IC7601
BP5451-1
TEST
FRQSW
CH1ADJ
CH1CTL
SENSE1
CH1DRIBE
CH1DISCH
GND
VIN
SW
CH2DISCH
CH2DRIVE
SENSE2
CH2CTL
CH2ADJ
R7603
R7602
1R8K
10K
R7605
0R0
R7606
0R0
R7609
R7608
12K
680
R7601
1K
VD:8.2V
VD1
L7601
Q7601
2SJ529S
VIN1
Q7602
2SJ529S
MSVCC:5.2V
MSVCC1
L7602
L7603
4.0A
FU7601
CEK1288
D7604
RSX201L-30
D7605
RSX201L-30
C7601
470/16
D7601
RSX201L-30
D7602
RSX201L-30
C7602
2R2
C7603
470/16
C7604
2R2
RSX201L-30
D7603
C7605
470/16
C7607
4R7
C7608
2200/16
GND
INPUT CIRCUIT
BUP
BUP4
BUP3
BUP2
BUP1
CN7501
L7501
1 BUP-OUT
2 BUP-IN
3 GND
C7501
3300/16
D7501
1SR154-400
D7502
1SR154-400
GND2
GND1
DD2V, DD6V
FU7703
CEK1284
2.0A
IC7701
BP5451-1
R7703
R7702
2K
27K
R7705
0R0
R7706
0R0
R7713
R7707
10K
4R7K
R7701
1K
DD6V:6.3V
DD6V1
FU7702
CEK1284
2.0A
L7701
Q7701
2SJ529S
VIN2
Q7702
2SJ529S
DD2V:2.2V
L7702
DD18V1
L7703
3.0A
FU7701
CEK1286
D7705
RSX201L-30
D7704
RSX201L-30
C7701
470/16
D7701
RSX201L-30
C7702
2R2
C7703
470/16
C7704
2R2
D7702
RSX201L-30
C7705
470/16
C7707
4R7
VDD56
VDD54V
FU7801
CEK1278
5.4V
IC7801
S-812C54AUA-C3I
VOUT
VIN
VSS
Q7801
2SB1184F5
R7801
470
D7802
1SR154-400
Q7802
2SD1664
R7806
2R2K
C7801
4R7
C7802
R001
C7803
C7804
100/10
R01
C7805
R01
R7803
R7802
2R2
2R2
R7805
R7804
2R2
2R2
C7807
2200/16
D7801
UDZS18(B)
C7808
R1

K POWER SUPPLY UNIT


INPUT CIRCUIT
CN7501
1 BUP-OUT
2 BUP-IN
3 GND
BUP1
BUP2
BUP3
BUP4
GND1
GND2
D7501 1SR154-400
D7502 1SR154-400
GND
L7501
BUP
C7501 3300/16
VD, MSVCC
D7604 RSX201L-30
D7605 RSX201L-30
C7608 2200/16
C7607 4R7
GND
FU7601 4.0A CEK1288
L7603
MSVCC1
MSVCC:5.2V
R7609 680
R7608 12K
GND
C7606 470/16
L7602
D7603 RSX201L-30
Q7602 2SJ529S
R7606 0R0
C7604 2R2
C7603 470/16
VIN1
C7602 2R2
D7602 RSX201L-30
D7601 RSX201L-30
Q7601 2SJ529S
R7605 0R0
L7601
C7601 470/16
VD1
R7603 10K
R7602 1R8K
R7601 1K
IC7601 BP5451-1
FU7603 2.0A CEK1284
1 TEST
2 FRQSW
3 CH1ADJ
4 CH1CTL
5 SENSE1
6 CH1DRIBE
7 CH1DISCH
8 GND
9 VIN
10 MS
11 CH2DISCH
12 CH2DRIVE
13 SENSE2
14 CH2CTL
15 CH2ADJ
8.2V
DD2V, DD6V
IC7701 BP5451-1
FU7703 2.0A CEK1284
R7713 4R7K
R7707 10K
R7706 0R0
R7705 0R0
R7703 27K
R7702 2K
R7701
VIN2
1 2 3 4


GND
D7705
RSX201L-30
D7704
RSX201L-30
C7707
4R7
GND
3.0A
FU7701
CEK1286
L7703
DD18V1
DD2V:2.2V
L7702
C7706
470/16
D7702
RSX201L-30
R7713
4R7K
R7707
10K
R7706
0R0
Q7702
2SJ529S
C7704
2R2
GND
C7703
470/16
VIN2
GND
C7702
2R2
Q7701
2SJ529S
R7705
0R0
D7701
RSX201L-30
L7701
R7703
27K
R7702
2K
GND
C7701
470/16
DD6V1
R7701
1K
6.3V
FU7702
CEK1284
2.0A
4
VDD54V
R7806
2R2K
C7808
R1
Q7802
2SD1664
D7801
UDZS18(B)
D7802
1SR154-400
R7804
2R2
R7805
2R2
C7807
2200/16
R7802
2R2
R7803
2R2
R7801
470
Q7801
2SB1184F5
C7805
R01
IC7801
S-812C54AUA-C3I
VSS
VIN
VOUT
1
2
3
C7804
R01
C7803
100/10
C7802
R001
5.4V
C7801
4R7
GND
FU7801
CEK1278
VDD56
5

A

K-b

B

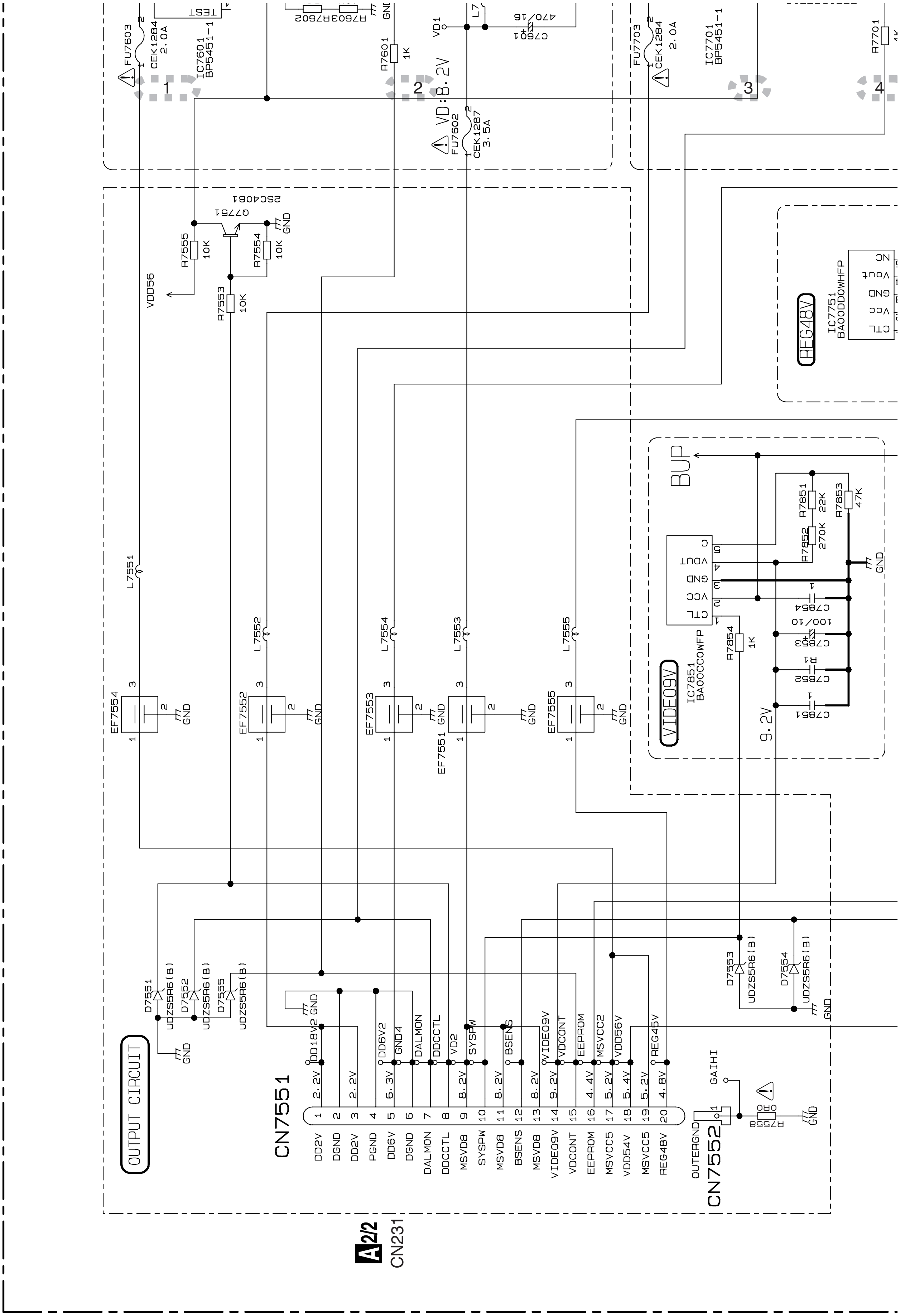
C

K-b
K-a

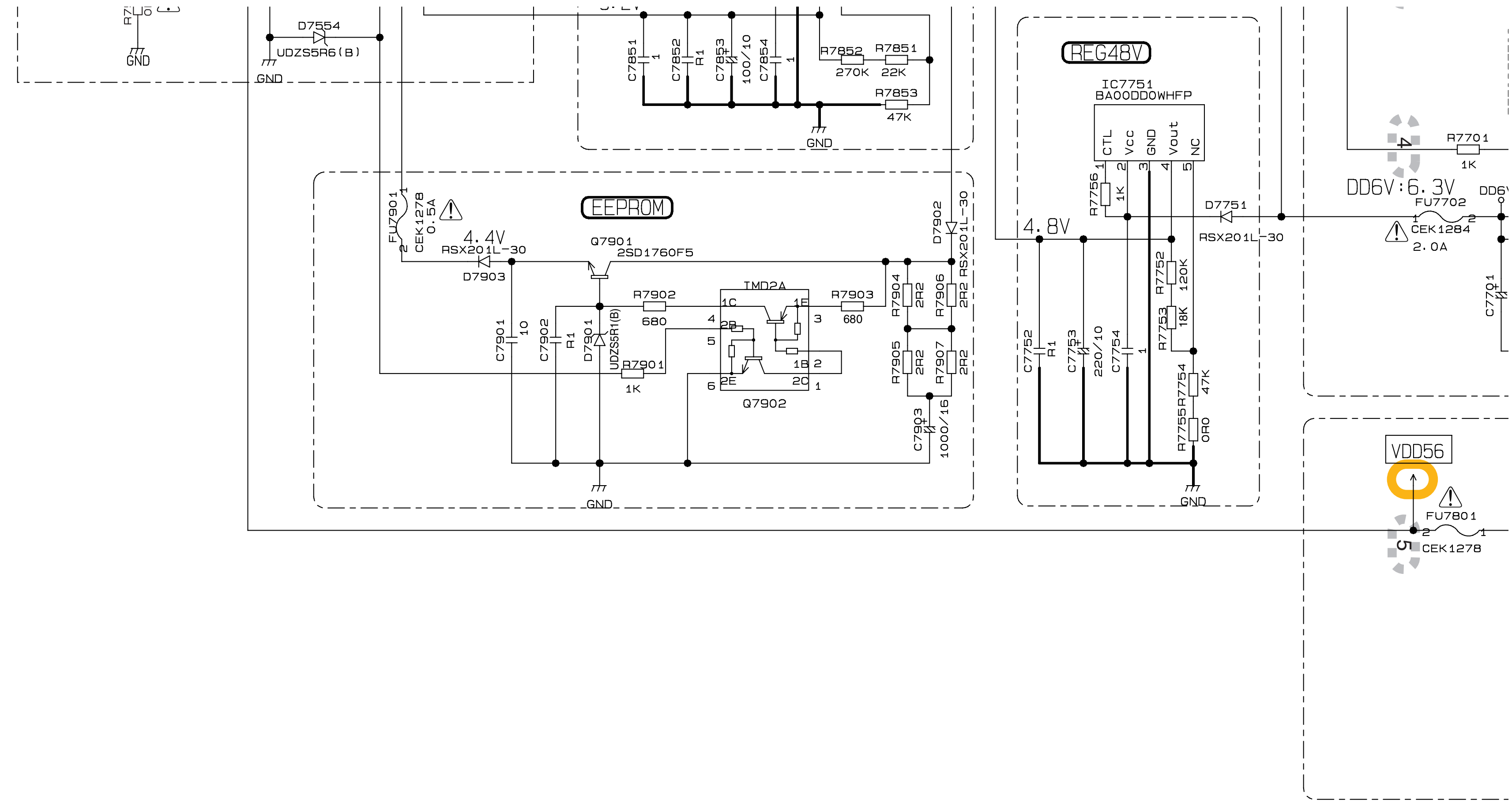
D

E

F


OUTPUT CIRCUIT
CN7551
DD2V
DGND
DD2V
PGND
DD6V
DGND
DALMON
DDCCTL
MSVD8
SYSPW
MSVD8
BSENS
MSVD8
VIDEO9V
VDCONT
EEPROM
MSVCC5
VDD54V
MSVCC5
REG48V
2.2V
2.2V
6.3V
8.2V
8.2V
8.2V
9.2V
4.4V
5.2V
5.4V
5.2V
4.8V
DD18V2
DD6V2
GND4
DALMON
DDCCTL
VD2
SYSPW
BSENS
VIDEO9V
VDCONT
EEPROM
MSVCC2
VDD56V
REG45V
CN7552
OUTERGND
GAIHI
R7556
GND
A 2/2 CN231
D7551 UDZS5R6(B)
D7552 UDZS5R6(B)
D7555 UDZS5R6(B)
D7553 UDZS5R6(B)
D7554 UDZS5R6(B)
EF7554
EF7552
EF7553
EF7551
EF7555
L7551
L7552
L7554
L7553
L7555
VDD56
R7555 10K
R7553 10K
R7554 10K
Q7751 2SC4081
FU7603 CEK1284 2.0A
IC7601 BP5451-1
TEST
R7602 R7603
R7601 1K
VD1
C7601 470/16
VD:8.2V
FU7602 CEK1287 3.5A
FU7703 CEK1284 2.0A
IC7701 BP5451-1
R7701
1
2
3
4
REG48V
IC7751 BA00DD0WHFP
CTL VCC GND Vout NC
BUP
VIDEO9V
IC7851 BA00CC0WFP
CTL VCC GND VOUT C
R7851 22K
R7852 270K
R7853 47K
R7854 1K
C7851
C7852
C7853 100/10
C7854
9.2V
GND

K-a


D7554
UDZS5R6(B)
GND
C7851
1
C7852
R1
C7853
100/10
C7854
R7852
270K
R7851
22K
R7853
47K
EEPROM
FU7901
CEK1278
0.5A
4.4V
RSX201L-30
D7903
Q7901
2SD1760F5
C7901
10
C7902
D7901
UDZS5R1(B)
R7902
680
R7901
1K
IMD2A
Q7902
R7903
680
R7904
2R2
R7905
R7906
R7907
D7902
C7903
1000/16
REG48V
IC7751
BA00DD0WHFP
CTL
Vcc
GND
Vout
NC
R7756
4.8V
C7752
C7753
220/10
C7754
R7752
120K
R7753
18K
R7754
R7755
0R0
D7751
RSX201L-30
DD6V:6.3V
FU7702
CEK1284
2.0A
R7701
C7701
VDD56
FU7801
CEK1278
4
5

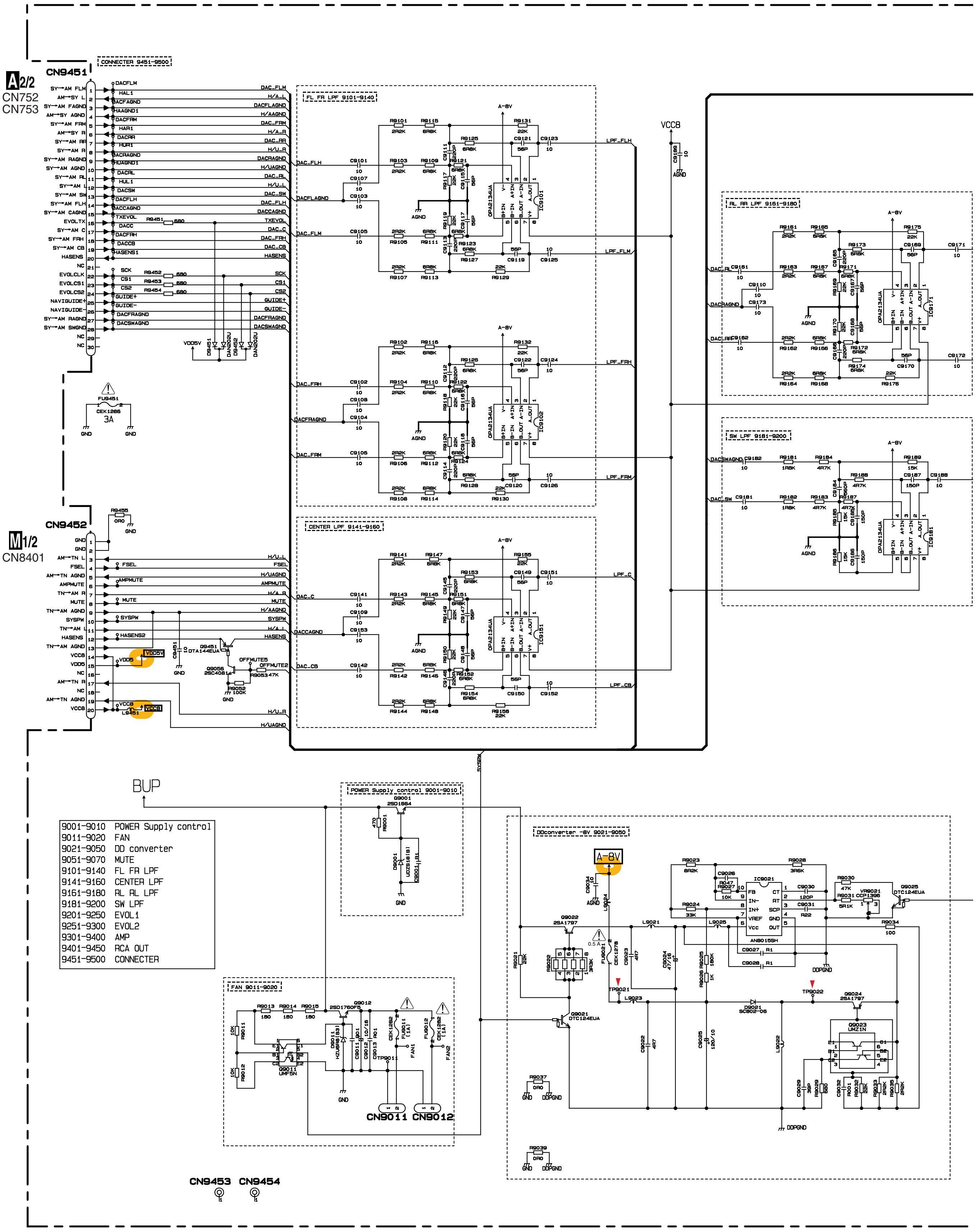
PARTS No.	CIRCUIT NAME
7501-7550	INPUT CIRCUIT
7551-7600	OUTPUT CIRCUIT
7601-7700	VD, MSVCC
7701-7750	DD6V, DD2V
7751-7800	REG48V
7801-7850	VDD54V
7851-7900	VIDEO9V
7901-7950	VD, MSVCC

K-a

K-b

10.12 AMP UNIT(GUIDE PAGE)

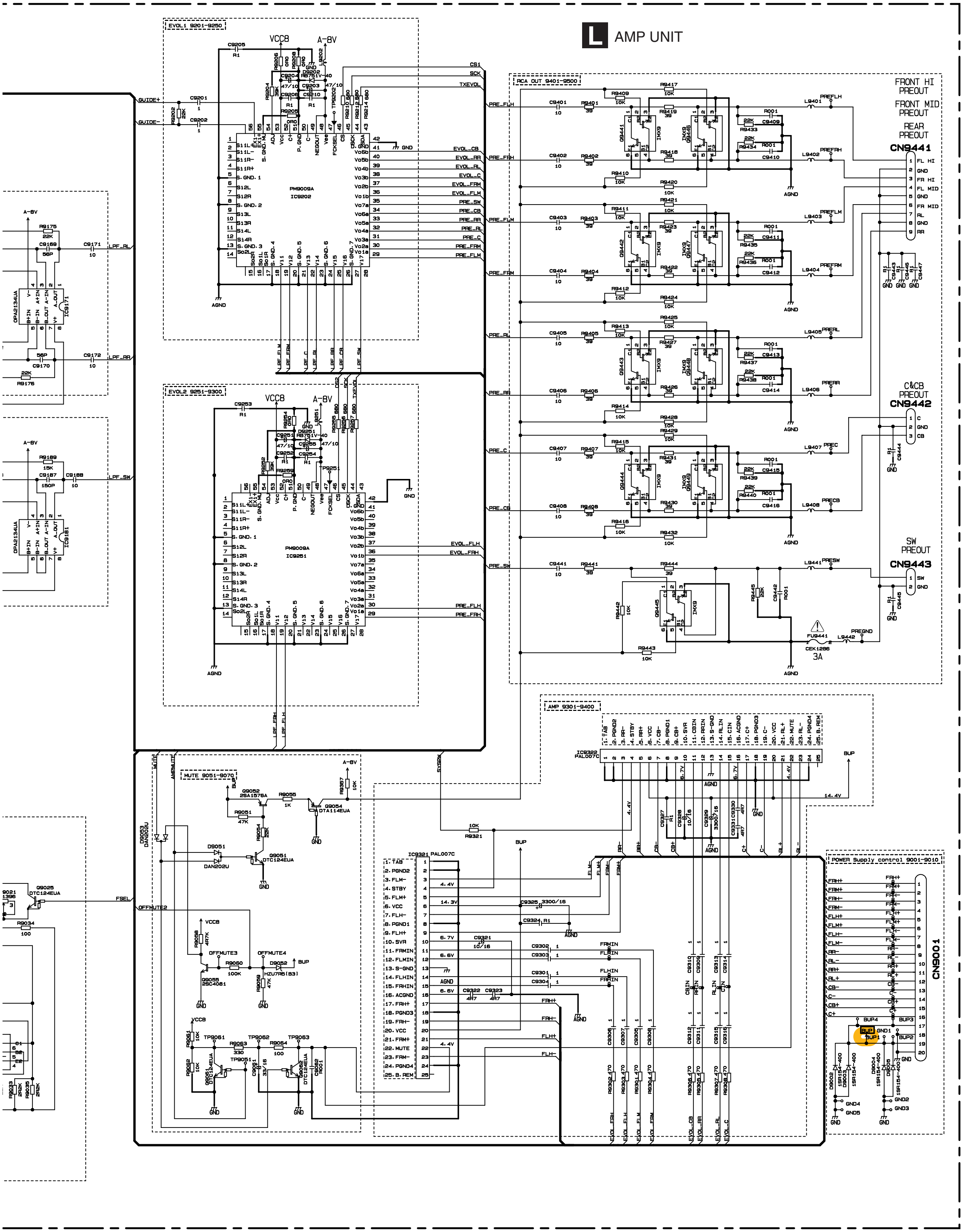
L-a

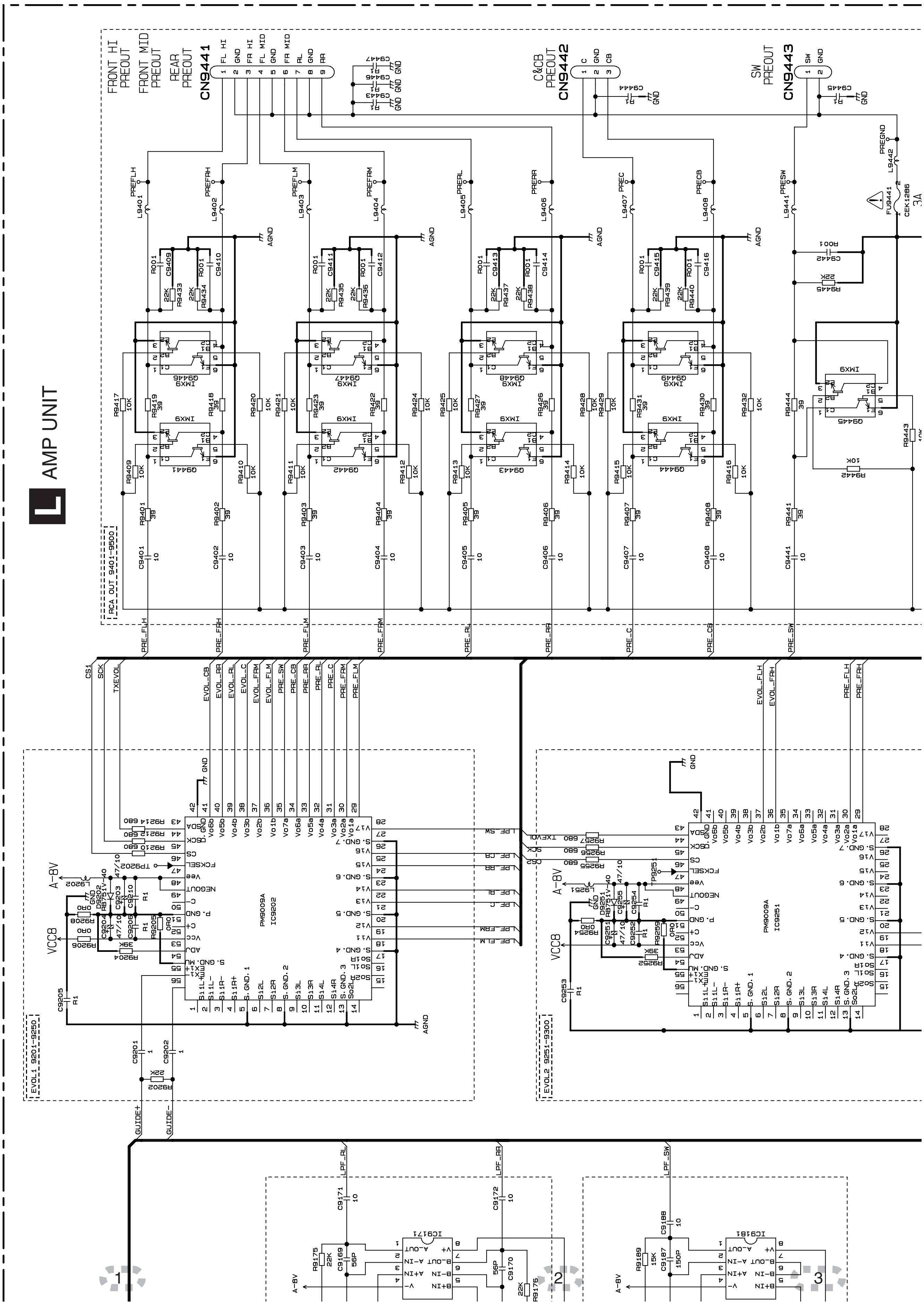

CN9451
A 2/2
CN752
CN753
CONNECTER 9451-9500
FL FR LPF 9101-9140
CENTER LPF 9141-9160
RL RR LPF 9161-9180
SW LPF 9181-9200
VCCB
A-8V
OPA2134UA
IC9101
IC9102
IC9151
IC9171
IC9181
LPF_FLH
LPF_FLM
LPF_FRH
LPF_FRM
LPF_C
LPF_CB
DAC_FLH
DAC_FLM
DAC_FRH
DAC_FRM
DAC_C
DAC_CB
DAC_RL
DAC_RR
DAC_SW
DACFLAGND
DACFRAGND
DACCAGND
DACRAGND
DACSWAGND
AGND
FU9451
CEK1266
3A
GND
CN9452
M 1/2
CN8401
FSEL
AMPMUTE
MUTE
SYSPW
HASENS2
VDD5V
VCCB
L9451
Q9451
DTA144EUA
Q9056
2SC4081
OFFMUTE5
OFFMUTE2
BUP
POWER Supply control 9001-9010
Q9001
2SD1664
D9001
UDZS18(B)
FAN 9011-9020
Q9012
2SD1760F5
Q9011
UMF5N
D9011
HZU6R8(B3)
FU9011
FU9012
FAN1
FAN2
CN9011
CN9012
DDconverter -8V 9021-9050
A-8V
IC9021
AN8015SH
Q9022
2SA1797
Q9021
DTC124EUA
Q9023
UMZ1N
Q9024
2SA1797
Q9025
DTC124EUA
VR9021
CCP1396
FU9021
CEK1278
0.5 A
D9021
SC802-06
TP9021
TP9022
L9021
L9022
L9023
L9025
DDPGND
CN9453
CN9454

9001-9010	POWER Supply control
9011-9020	FAN
9021-9050	DD converter
9051-9070	MUTE
9101-9140	FL FR LPF
9141-9160	CENTER LPF
9161-9180	RL RL LPF
9181-9200	SW LPF
9201-9250	EVOL1
9251-9300	EVOL2
9301-9400	AMP
9401-9450	RCA OUT
9451-9500	CONNECTER

L

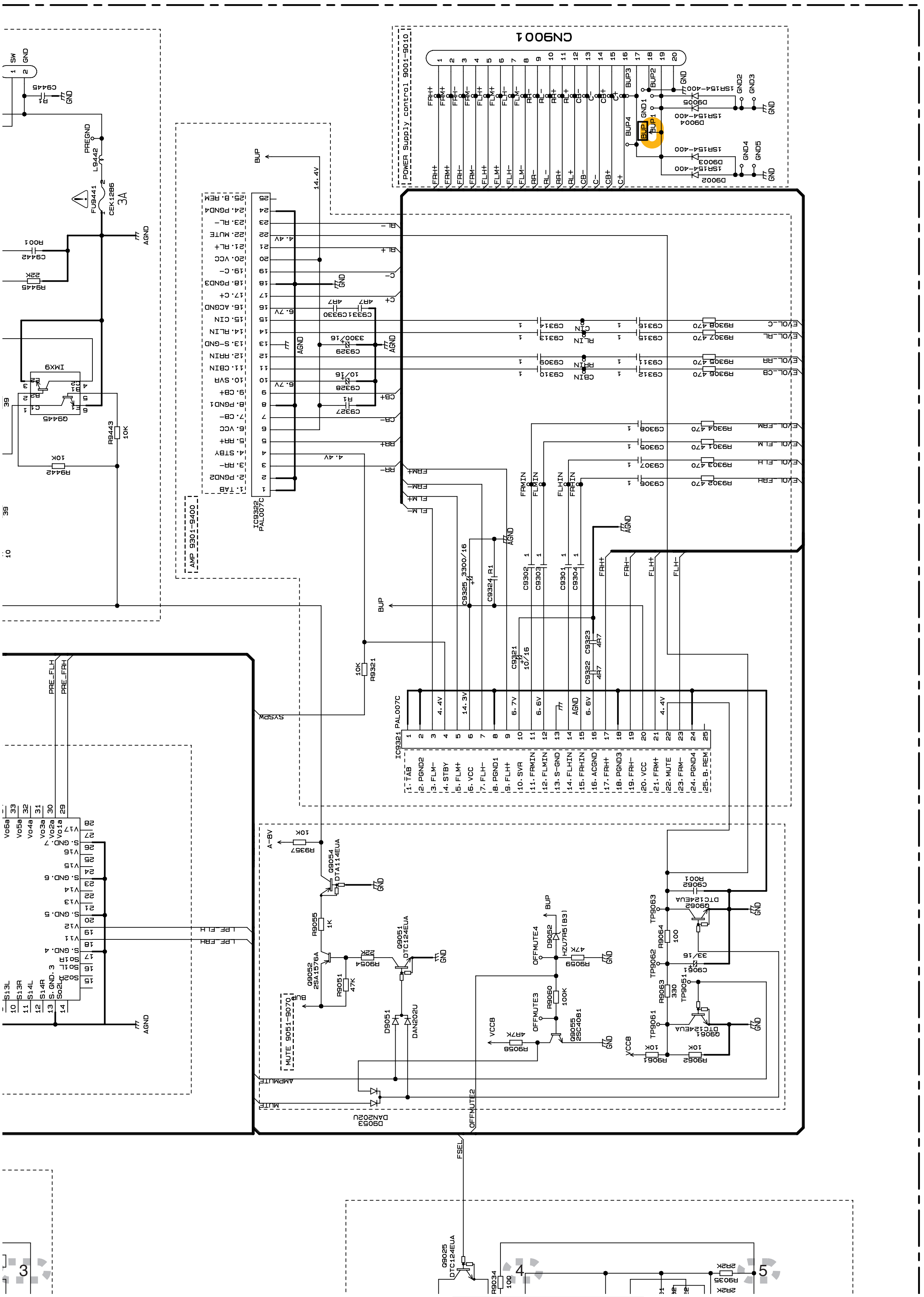
L-b


L AMP UNIT
EVOL1 9201-9250
EVOL2 9251-9300
PM9009A IC9202
PM9009A IC9251
RCA OUT 9401-9500
FRONT HI PREOUT
FRONT MID PREOUT
REAR PREOUT
CN9441
C&CB PREOUT
CN9442
SW PREOUT
CN9443
AMP 9301-9400
IC9322 PAL007C
IC9321 PAL007C
MUTE 9051-9070
POWER Supply control 9001-9010
CN9001
OPA2134UA IC9171
OPA2134UA IC9181
VCC8
A-8V
AGND
GND
BUP
FU9441 CEK1286 3A


L AMP UNIT
FRONT HI PREOUT
FRONT MID PREOUT
REAR PREOUT
CN9441
C&CB PREOUT
CN9442
SW PREOUT
CN9443
RCA OUT 9401-9500
EVOL1 9201-9250
EVOL2 9251-9300
PM9009A
IC9202
IC9251
IC9171
IC9181
VCC8
A-8V
AGND
GUIDE+
GUIDE-
LPF_RL
LPF_RR
LPF_SW
FU9441
CEK1286
3A

L-a L-b

L-b


CN9001
POWER Supply control 9001-9010
AMP 9301-9400
MUTE 9051-9070
IC9321 PAL007C
IC9322 PAL007C
1. TAB
2. PGND2
3. FLM-
4. STBY
5. FLM+
6. VCC
7. FLH-
8. PGND1
9. FLH+
10. SVR
11. FRMIN
12. FLMIN
13. S-GND
14. FLHIN
15. FRHIN
16. ACGND
17. FRH+
18. PGND3
19. FRH-
20. VCC
21. FRM+
22. MUTE
23. FRM-
24. PGND4
25. B. REM
14.4V
4.4V
6.7V
6.6V
14.3V
BUP
AGND
GND
SYSPW
AMPMUTE
MUTE
FSEL
OFFMUTE2
OFFMUTE3
OFFMUTE4
VCC8
A-8V
PRE_FLH
PRE_FRH
LPF FLH
LPF FRH
PREGND
FU9441
CEK1286
3A
L9442
IMX9
Q9445
R9443
10K
R9442
Q9054 DTA114EUA
Q9052 2SA1576A
Q9051 DTC124EUA
Q9055 2SC4081
Q9060 DTC124EUA
Q9062 DTC124EUA
Q9025 DTC124EUA
D9051
D9052 HZU7R5(B3)
D9053 DAN202U
DAN202U
D9002
D9003
D9004
D9005
1SR154-400
R9321
C9325 3300/16
C9324 R1
EVOL_C
EVOL_RL
EVOL_RR
EVOL_CB
EVOL_FRM
EVOL_FLM
EVOL_FLH
EVOL_FRH

A

L-b

B

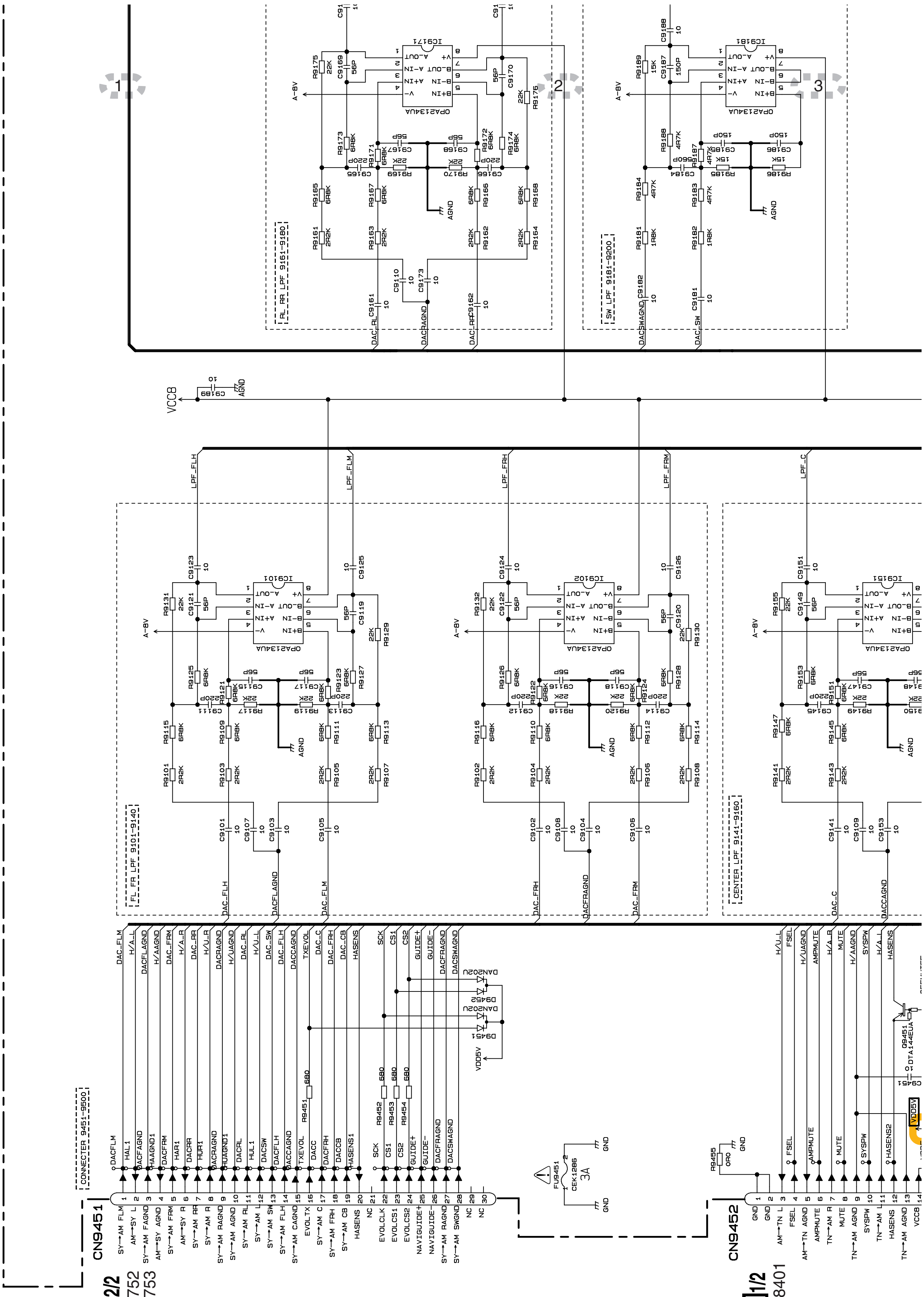
C

D

E

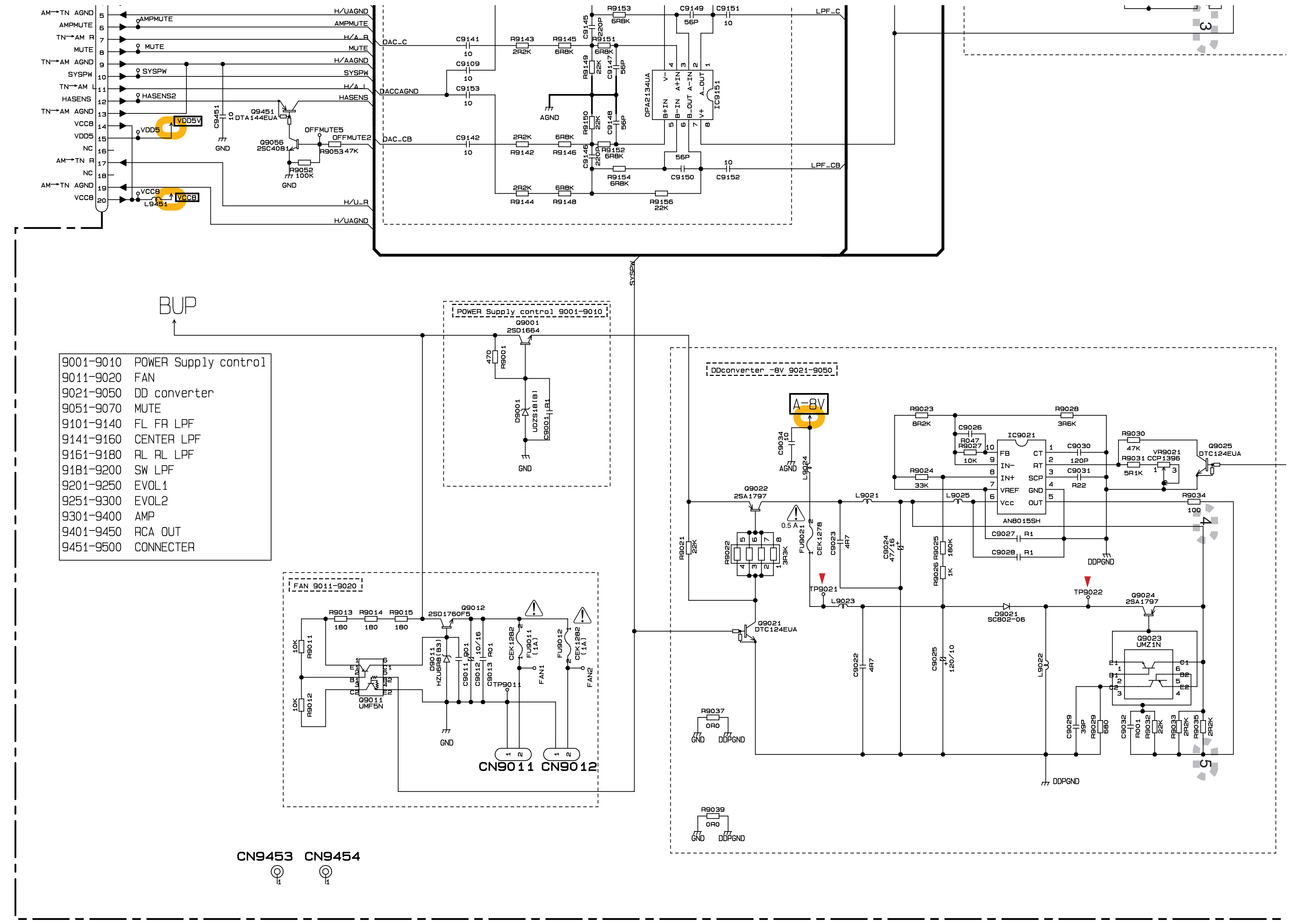
F

L-b
L-a



1
2
3
A 2/2 CN752 CN753
CN9451
M 1/2 CN8401
CN9452
CONNECTER 9451-9500
FL FR LPF 9101-9140
CENTER LPF 9141-9160
RL RR LPF 9161-9180
SW LPF 9181-9200
IC9101
IC9102
IC9151
IC9171
IC9181
OPA2134UA
VCC8
A-8V
AGND
VDD5V
D9451
D9452
DAN202U
Q9451
DTA144EUA
FU9451
CEK1286
3A
LPF_FLH
LPF_FLM
LPF_FRH
LPF_FRM
LPF_C
DAC_FLH
DAC_FLM
DAC_FRH
DAC_FRM
DAC_C
DAC_RL
DAC_RR
DAC_SW
DACFLAGND
DACFRAGND
DACCAGND
DACRAGND
DACSWAGND

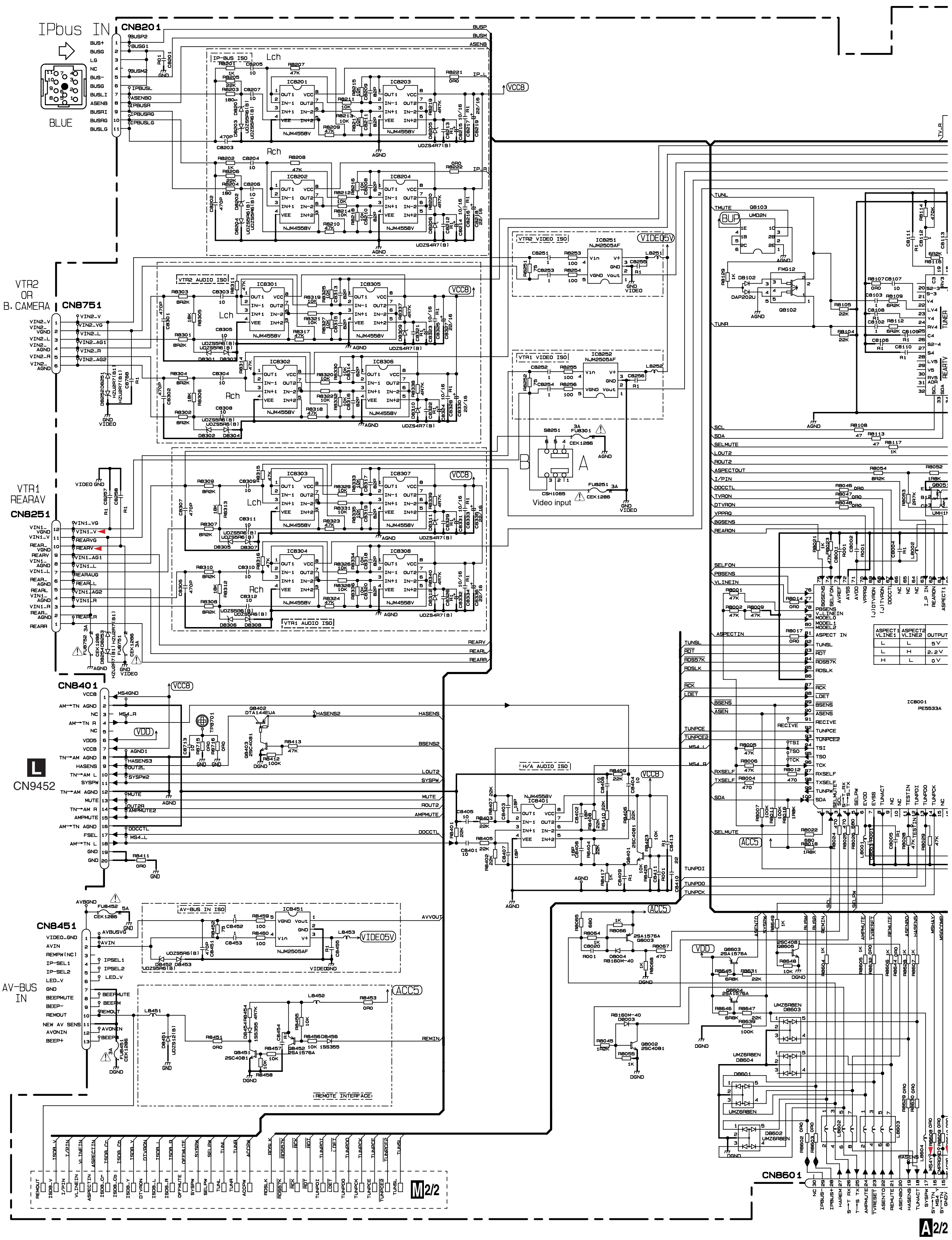
L-a


BUP
POWER Supply control 9001-9010
FAN 9011-9020
DDconverter -8V 9021-9050
A-8V
VDD5V
VCC8
IC9021 AN8015SH
IC9151 OPA2134UA
Q9001 2SD1664
Q9012 2SD1760F5
Q9011 UMF5N
Q9021 DTC124EUA
Q9022 2SA1797
Q9023 UMZ1N
Q9024 2SA1797
Q9025 DTC124EUA
Q9451 DTA144EUA
Q9056 2SC4081
D9001 UDZS18(B)
D9011 HZU6R8(B3)
D9021 SC802-06
VR9021 CCP1396
FU9011 CEK1282 (1A)
FU9012 CEK1282 (1A)
FU9021 CEK1278 0.5 A
TP9011
TP9021
TP9022
CN9011
CN9012
CN9453
CN9454
FAN1
FAN2
SYSPW
DDPGND
AGND
GND
LPF_C
LPF_CB
DAC_C
DAC_CB
DACCAGND
AM→TN AGND
AMPMUTE
TN→AM R
MUTE
TN→AM AGND
SYSPW
TN→AM L
HASENS
TN→AM AGND
VCC8
VDD5
NC
AM→TN R
NC
AM→TN AGND
VCC8
H/UAGND
H/A_R
H/AAGND
H/A_L
H/U_R
OFFMUTE5
OFFMUTE2
HASENS2
L-a
L-b

9001-9010	POWER Supply control
9011-9020	FAN
9021-9050	DD converter
9051-9070	MUTE
9101-9140	FL FR LPF
9141-9160	CENTER LPF
9161-9180	RL RL LPF
9181-9200	SW LPF
9201-9250	EVOL1
9251-9300	EVOL2
9301-9400	AMP
9401-9450	RCA OUT
9451-9500	CONNECTER

10.13 TUNER SELECTOR UNIT(SELECTOR)(GUIDE PAGE)

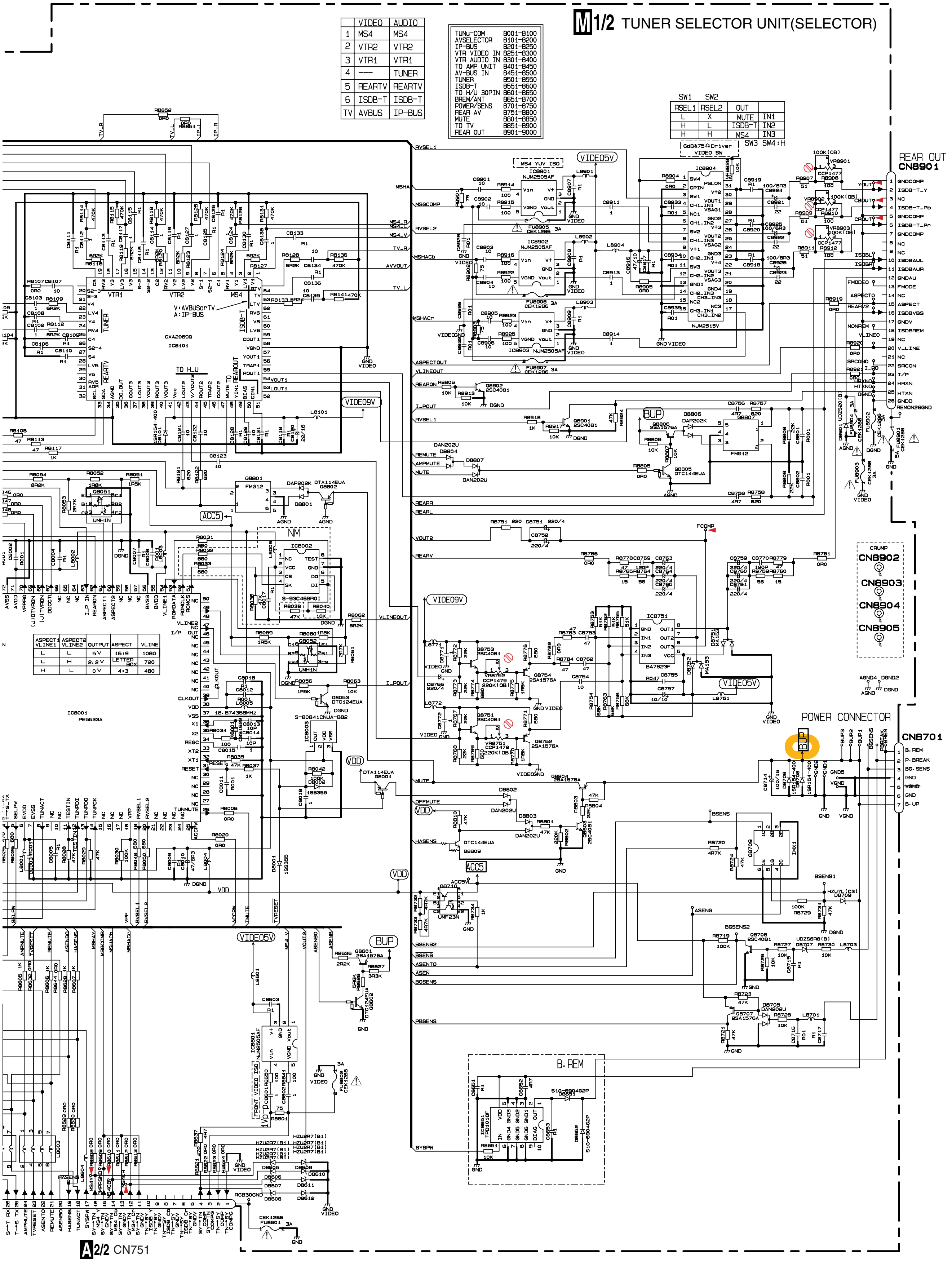
M-a 1/2


A
B
C
D
E
F
IPbus IN
CN8201
BLUE
BUS+
BUSG
LG
NC
BUS−
BUSG
BUSLI
ASENB
BUSRI
BUSRG
BUSLG
IP-BUS ISO
Lch
Rch
IC8201
IC8202
IC8203
IC8204
NJM4558V
VCC8
AGND
BUSP
BUSM
ASENB
IP_L
IP_R
VTR2 OR B. CAMERA
CN8751
VIN2_V
VIN2_VGND
VIN2_L
VIN2_AGND
VIN2_R
VIN2_AGND
VTR2 AUDIO ISO
IC8301
IC8302
IC8305
IC8306
VTR2 VIDEO ISO
IC8251
NJM2505AF
VIDEO5V
VTR1 VIDEO ISO
IC8252
S8251
CSH1065
Video input
VTR1 REARAV
CN8251
VTR1 AUDIO ISO
IC8303
IC8304
IC8307
IC8308
REARV
REARL
REARR
CN8401
CN9452
VCC8
VDD
HASENS
BSENS2
LOUT2
SYSPW
MUTE
ROUT2
AMPMUTE
DDCCTL
H/A AUDIO ISO
IC8401
NJM4558V
CN8451
AV-BUS IN
AV-BUS IN ISO
IC8451
NJM2505AF
AVVOUT
VIDEO5V
ACC5
REMOTE INTERFACE
REMIN
M 2/2
TUNL
TMUTE
Q8103
UMD2N
BUP
Q8102
FMG12
DAP202U
TUNR
SCL
SDA
SELMUTE
LOUT2
ROUT2
ASPECTOUT
I/PIN
DDCCTL
TVRON
DTVRON
VPPRG
BGSENS
REARON
SELFON
PBSENS
V.LINEIN
ASPECTIN
TUNSL
RDT
RDS57K
RDSLK
RCK
LDET
BSENS
ASEN
TUNPCE
TUNPCE2
MS4_R
RXSELF
TXSELF
TUNPDI
TUNPDO
TUNPCK
IC8001
PE5533A
ACC5
VDD
CN8601
TUNER
REARTV
A 2/2

ASPECT1 VLINE1	ASPECT2 VLINE2	OUTPUT
L	L	5V
L	H	2.2V
H	L	0V

M 1/2

M 1/2 TUNER SELECTOR UNIT(SELECTOR)


REAR OUT
CN8901
POWER CONNECTOR
CN8701
CN8902
CN8903
CN8904
CN8905
CRUMP
IC8101
CXA2069Q
IC8001
PE5533A
IC8002
S-93C46BR0I
IC8003
S-80841CNUA-8B2
IC8901
NJM2505AF
IC8902
NJM2505AF
IC8903
NJM2505AF
IC8904
NJM2515V
IC8751
BA7623F
IC8601
NJM2505AF
IC8651
TPD1018F
MS4 YUV ISO
6dB&75Ω Driver
VIDEO SW
SW3 SW4:H
VIDEO5V
VIDEO9V
VDD
BUP
ACC5
NM
B.REM
FRONT VIDEO ISO
A 2/2 CN751

	VIDEO	AUDIO
1	MS4	MS4
2	VTR2	VTR2
3	VTR1	VTR1
4	---	TUNER
5	REARTV	REARTV
6	ISDB-T	ISDB-T
TV	AVBUS	IP-BUS

TUNu-COM	8001-8100
AVSELECTOR	8101-8200
IP-BUS	8201-8250
VTR VIDEO IN	8251-8300
VTR AUDIO IN	8301-8400
TO AMP UNIT	8401-8450
AV-BUS IN	8451-8500
TUNER	8501-8550
ISDB-T	8551-8600
TO H/U 30PIN	8601-8650
BREM/ANT	8651-8700
POWER/SENS	8701-8750
REAR AV	8751-8800
MUTE	8801-8850
TO TV	8851-8900
REAR OUT	8901-9000

SW1 RSEL1	SW2 RSEL2	OUT	
L	X	MUTE	IN1
H	L	ISDB-T	IN2
H	H	MS4	IN3

ASPECT1 VLINE1	ASPECT2 VLINE2	OUTPUT	ASPECT	VLINE
L	L	5V	16:9	1080
L	H	2.2V	LETTER BOX	720
H	L	0V	4:3	480

M 1/2

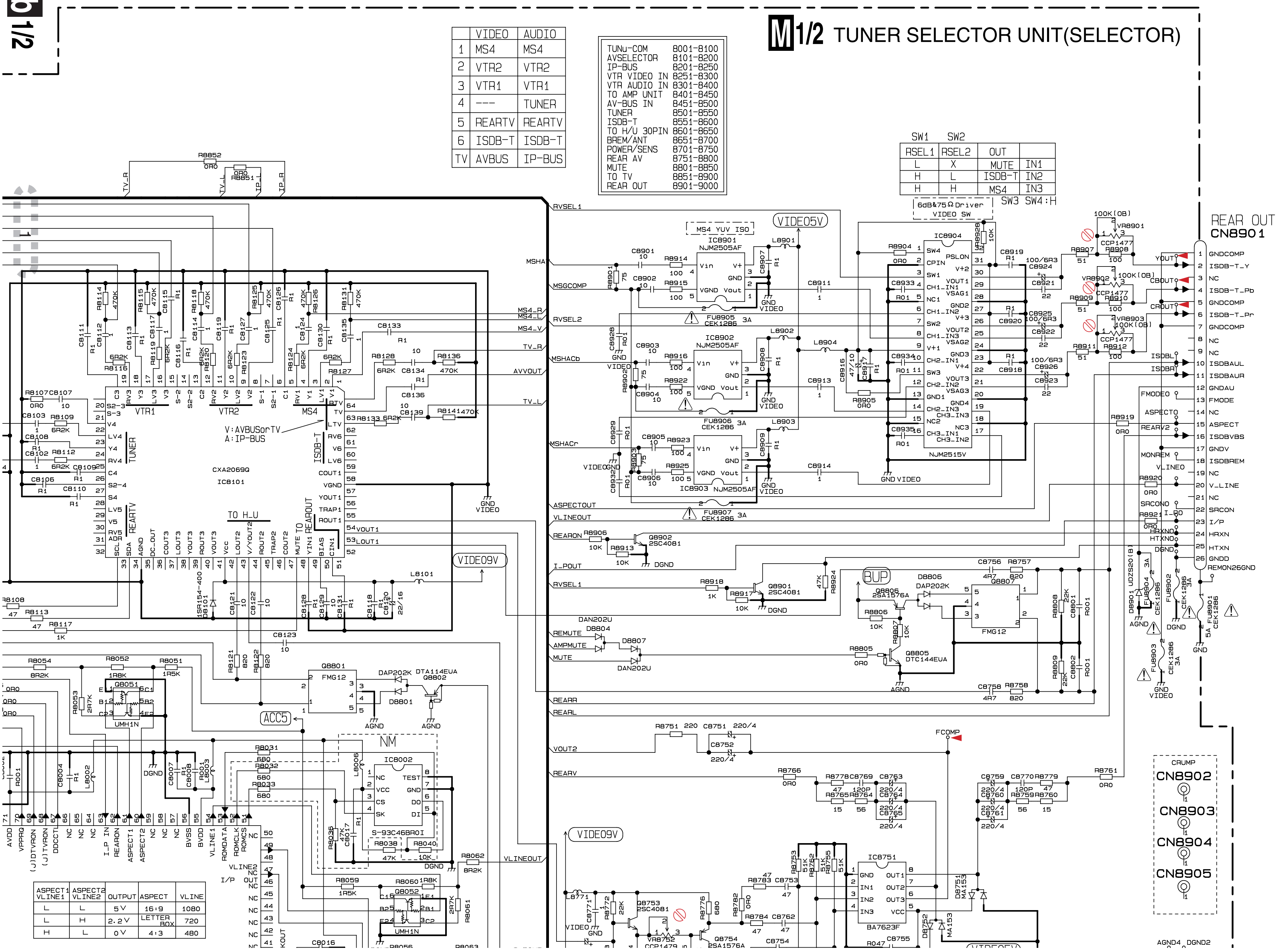
M1/2 TUNER SELECTOR UNIT(SELECTOR)

	VIDEO	AUDIO
1	MS4	MS4
2	VTR2	VTR2
3	VTR1	VTR1
4	---	TUNER
5	REARTV	REARTV
6	ISDB-T	ISDB-T
TV	AVBUS	IP-BUS

TUNu-COM	8001-8100
AVSELECTOR	8101-8200
IP-BUS	8201-8250
VTR VIDEO IN	8251-8300
VTR AUDIO IN	8301-8400
TO AMP UNIT	8401-8450
AV-BUS IN	8451-8500
TUNER	8501-8550
ISDB-T	8551-8600
TO H/U 30PIN	8601-8650
BREM/ANT	8651-8700
POWER/SENS	8701-8750
REAR AV	8751-8800
MUTE	8801-8850
TO TV	8851-8900
REAR OUT	8901-9000

SW1 RSEL1	SW2 RSEL2	OUT	
L	X	MUTE	IN1
H	L	ISDB-T	IN2
H	H	MS4	IN3

SW3 SW4:H



REAR OUT
CN8901
1 GNDCOMP
2 ISDB-T_Y
3 NC
4 ISDB-T_Pb
5 GNDCOMP
6 ISDB-T_Pr
7 GNDCOMP
8 NC
9 NC
10 ISDBAUL
11 ISDBAUR
12 GNDAU
13 FMODE
14 NC
15 ASPECT
16 ISDBVBS
17 GNDV
18 ISDBREM
19 NC
20 V_LINE
21 NC
22 SRCON
23 I/P
24 HRXN
25 HTXN
26 GNDD
REMON26GND
YOUT
CBOUT
CROUT
ISDBL
ISDBR
FMODEO
ASPECTO
REARV2
MONREM
VLINEO
SRCONO
HRXNO
HTXNO
DGND
6dB&75Ω Driver
VIDEO SW
IC8904
NJM2515V
MS4 YUV ISO
IC8901
NJM2505AF
IC8902
NJM2505AF
IC8903
NJM2505AF
VIDEO5V
VIDEO9V
FU8905 CEK1286 3A
FU8906 CEK1286 3A
FU8907 CEK1286 3A
FU8901 CEK1286 5A
FU8902 CEK1286 3A
FU8903 CEK1286 3A
FU8904 CEK1286 3A
D8901 UDZS20(B)
RVSEL1
MSHA
MSGCOMP
MS4_R
MS4_L
MS4_V
RVSEL2
TV_R
MSHACb
AVVOUT
TV_L
MSHACr
ASPECTOUT
VLINEOUT
REARON
I_POUT
REMUTE
AMPMUTE
MUTE
REARR
REARL
VOUT2
REARV
BUP
Q8901 2SC4081
Q8902 2SC4081
Q8805 DTC144EUA
Q8806 2SA1576A
Q8807 FMG12
D8806 DAP202K
D8804 DAN202U
D8807 DAN202U
IC8101
CXA2069Q
V:AVBUSorTV
A:IP-BUS
VTR1
VTR2
MS4
TUNER
REARTV
ISDB-T
TO H_U
TO REAROUT
D8101 1SR154-400
L8101
Q8801 FMG12
Q8802 DTA114EUA
D8801 DAP202K
ACC5
NM
IC8002
S-93C46BR0I
Q8051 UMH1N
Q8052 UMH1N
FCOMP
IC8751
BA7623F
Q8753 2SC4081
Q8754 2SA1576A
D8751 MA153
D8752 MA153
CRUMP
CN8902
CN8903
CN8904
CN8905
AGND4 DGND2
AVDD
VPPRO
(J)DTVRON
(J)TVRON
DDCCTL
I_P IN
REARON
ASPECT1
ASPECT2
BVSS
BVDD
VLINE1
ROMDATA
ROMCLK
ROMCS
VLINE2
I/P OUT
KOUT

ASPECT1 VLINE1	ASPECT2 VLINE2	OUTPUT	ASPECT	VLINE
L	L	5V	16:9	1080
L	H	2.2V	LETTER BOX	720
H	L	0V	4:3	480

A

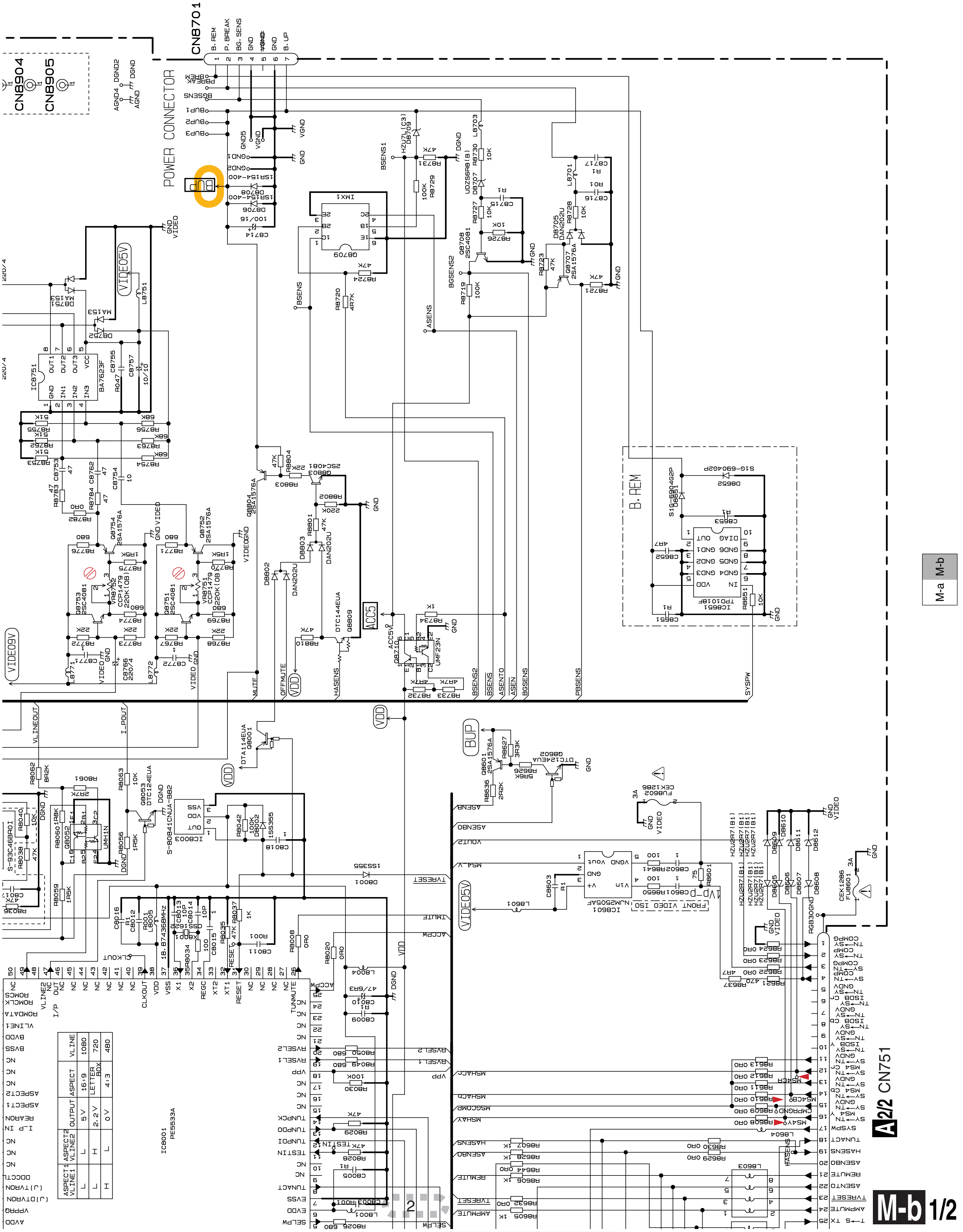
B

C

D

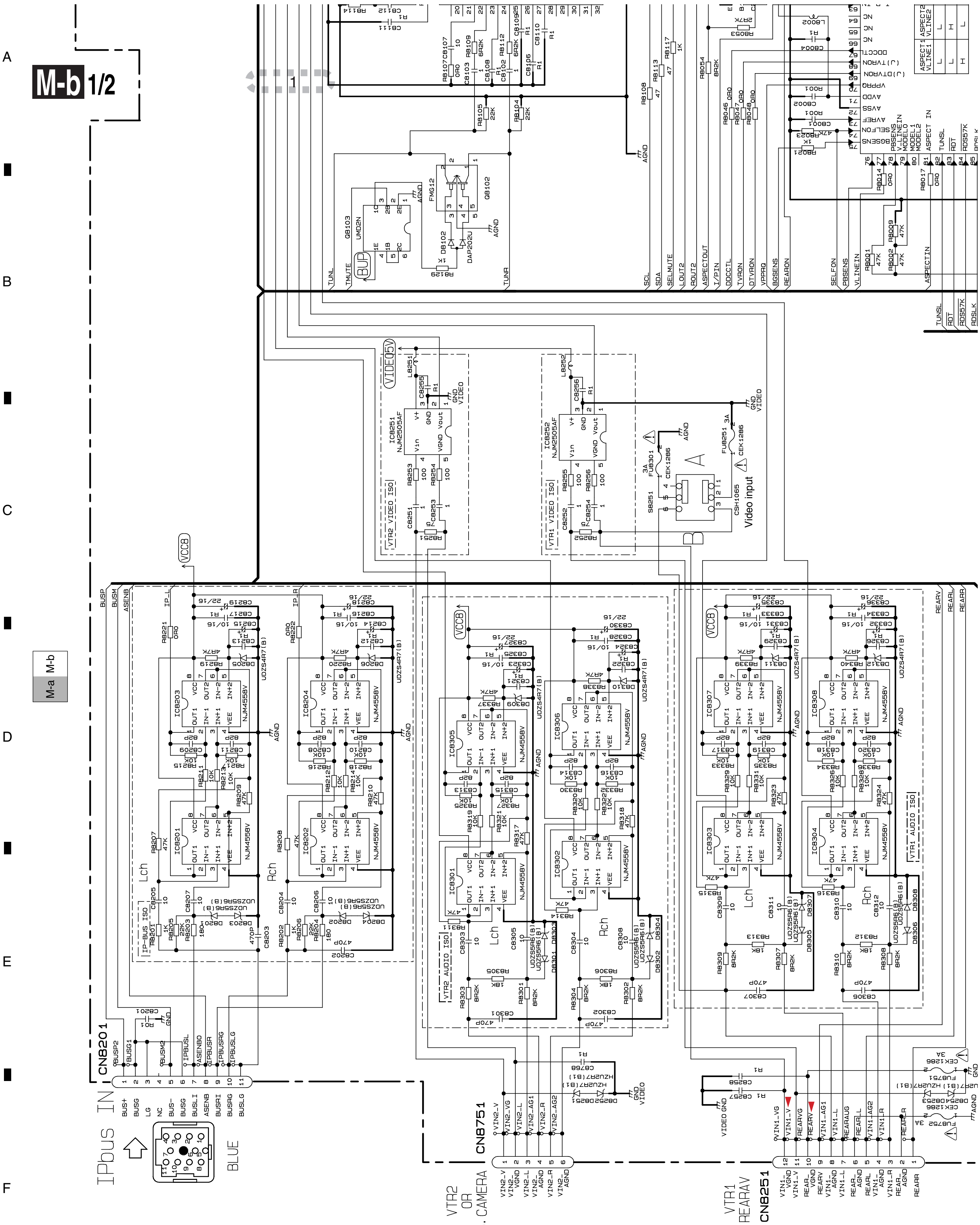
E

F

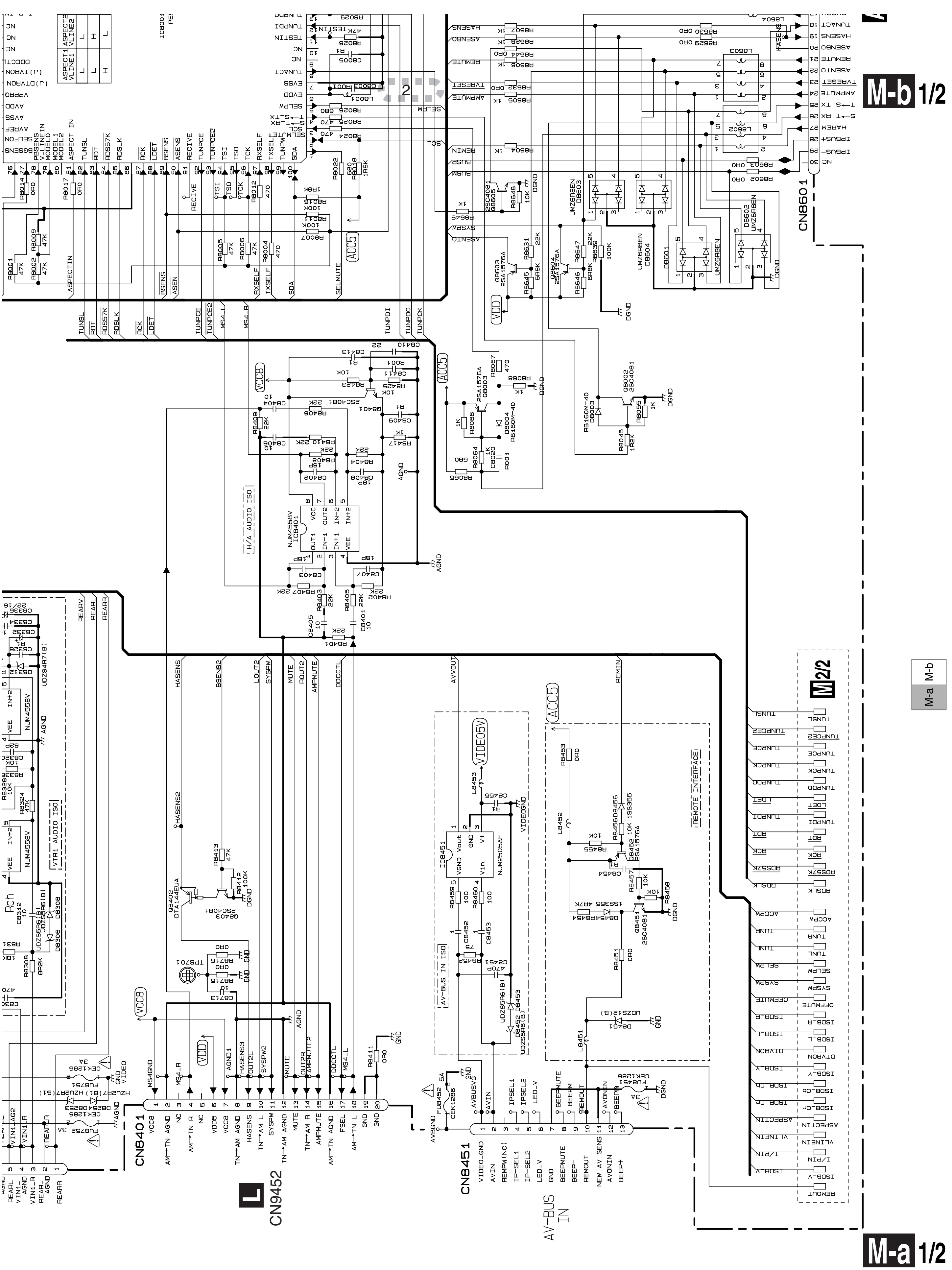

CN8701
B. REM
P. BREAK
BG. SENS
GND
VGND
GND
B. UP
POWER CONNECTOR
BUP
CN8904
CN8905
IC8751
BA7623F
VIDEO5V
VIDEO9V
Q8709
IMX1
Q8707
2SA1576A
Q8708
2SC4081
B. REM
IC8651
TPD1018F
ACC5V
VDD
BUP
IC8601
NJM2505AF
FRONT VIDEO OSD
IC8003
S-80841CNUA-BB2
IC8001
PE5533A
FU8601
CEK1286
FU8602
CEK1286
M-a M-b
CN751
A 2/2

M-b 1/2

M-b 1/2

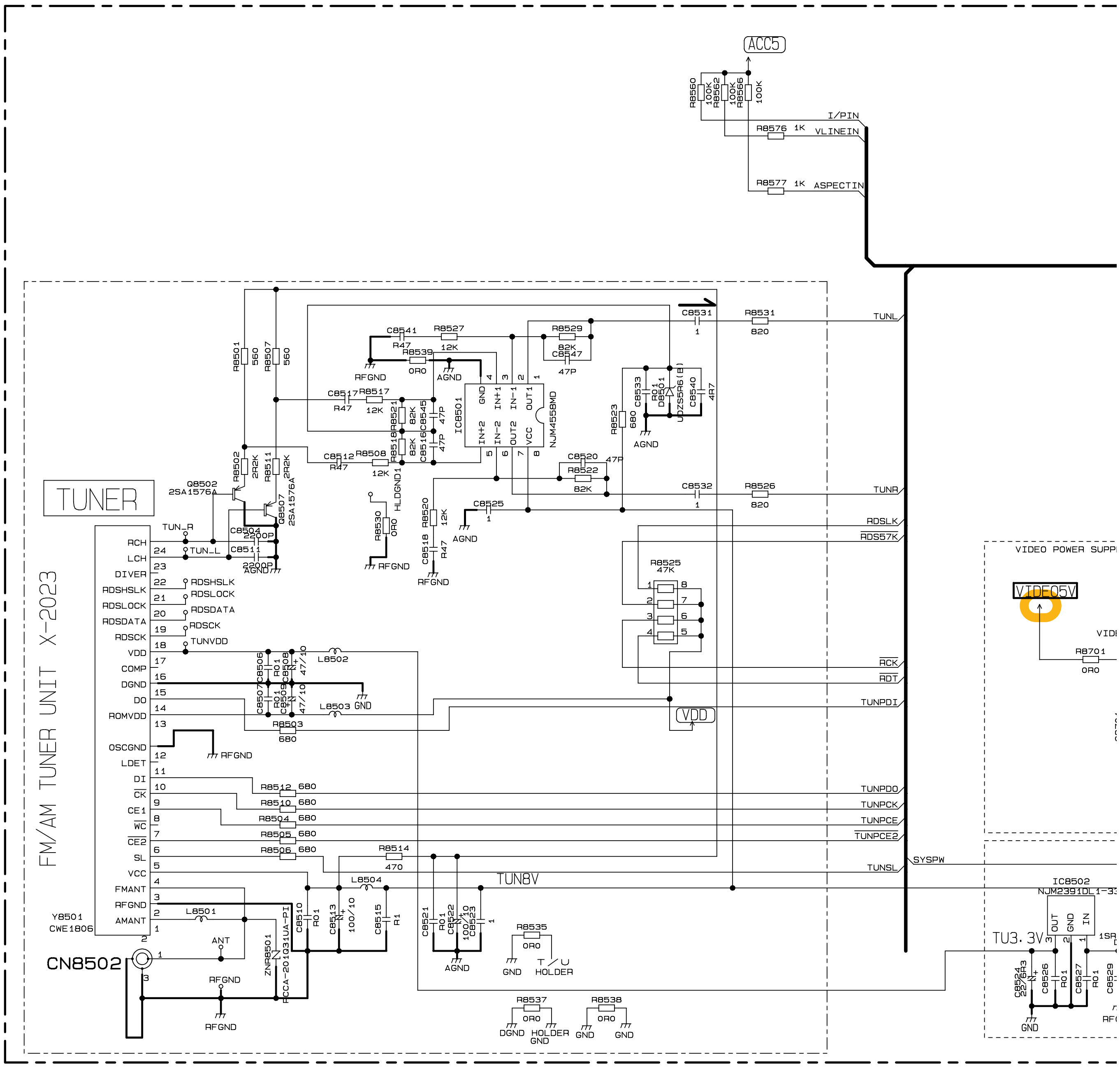

A
B
C
D
E
F
M-b
M-a
IPbus IN
BLUE
CN8201
IP-BUS ISO
Lch
Rch
VCC8
VTR2 VIDEO ISO
VTR1 VIDEO ISO
VIDEO5V
IC8251 NJM2505AF
IC8252 NJM2505AF
Video input
CSH1065
S8251
FU8301 3A CEK1286
FU8251 3A CEK1286
VTR2 AUDIO ISO
VTR1 AUDIO ISO
IC8201 NJM4558V
IC8202 NJM4558V
IC8203 NJM4558V
IC8204 NJM4558V
IC8301 NJM4558V
IC8302 NJM4558V
IC8303 NJM4558V
IC8304 NJM4558V
IC8305 NJM4558V
IC8306 NJM4558V
IC8307 NJM4558V
IC8308 NJM4558V
Q8102
Q8103 UMD2N
FMG12
D8102 DAP202U
BUP
CN8751
VTR2 OR B. CAMERA
CN8251
VTR1 REARAV
ASPECT1 VLINE1
ASPECT2 VLINE2

M-a 1/2

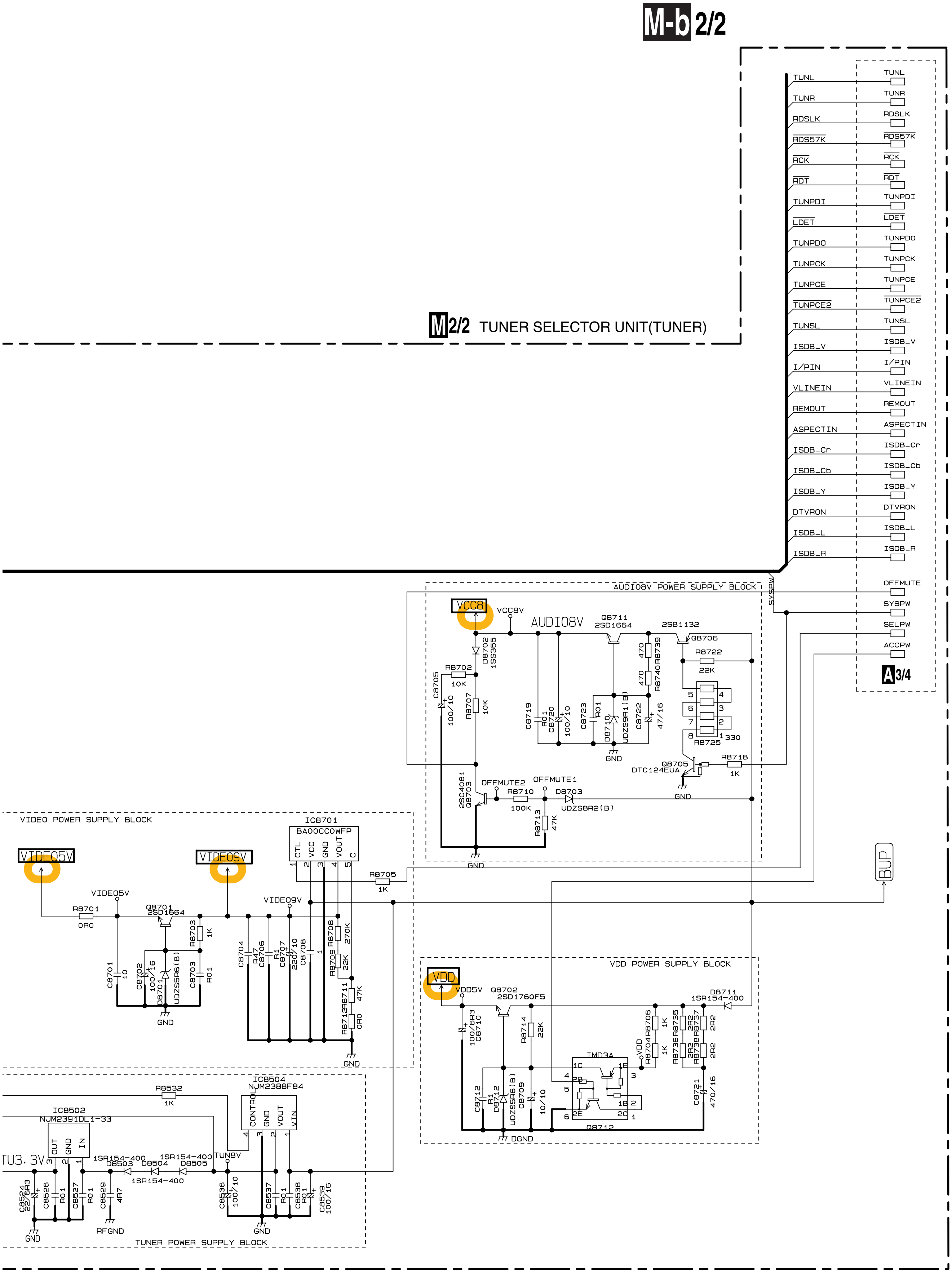

A
B
C
D
E
F
M-b 1/2
M-a 1/2
M 2/2
M-a M-b
CN8601
CN8401
CN9452
L
CN8451
AV-BUS IN
VIDEO_GND
AVIN
REMPW(NC)
IP-SEL1
IP-SEL2
LED-V
GND
BEEPMUTE
BEEP-
REMOUT
NEW AV SENS
AVONIN
BEEP+
VCC8
AM→TN AGND
NC
AM→TN R
NC
VDD5
VCC8
TN→AM AGND
HASENS
TN→AM L
SYSPW
TN→AM AGND
MUTE
TN→AM R
AMPMUTE
AM→TN AGND
FSEL
AM→TN L
GND
GND
IC8401 NJM4558V
H/A AUDIO ISO
IC8451 NJM2505AF
AV-BUS IN ISO
REMOTE INTERFACE
VTR1 AUDIO ISO
VCC8
VDD
ACC5
VIDEO5V
Rch
2

10.14 TUNER SELECTOR UNIT(TUNER)(GUIDE PAGE)

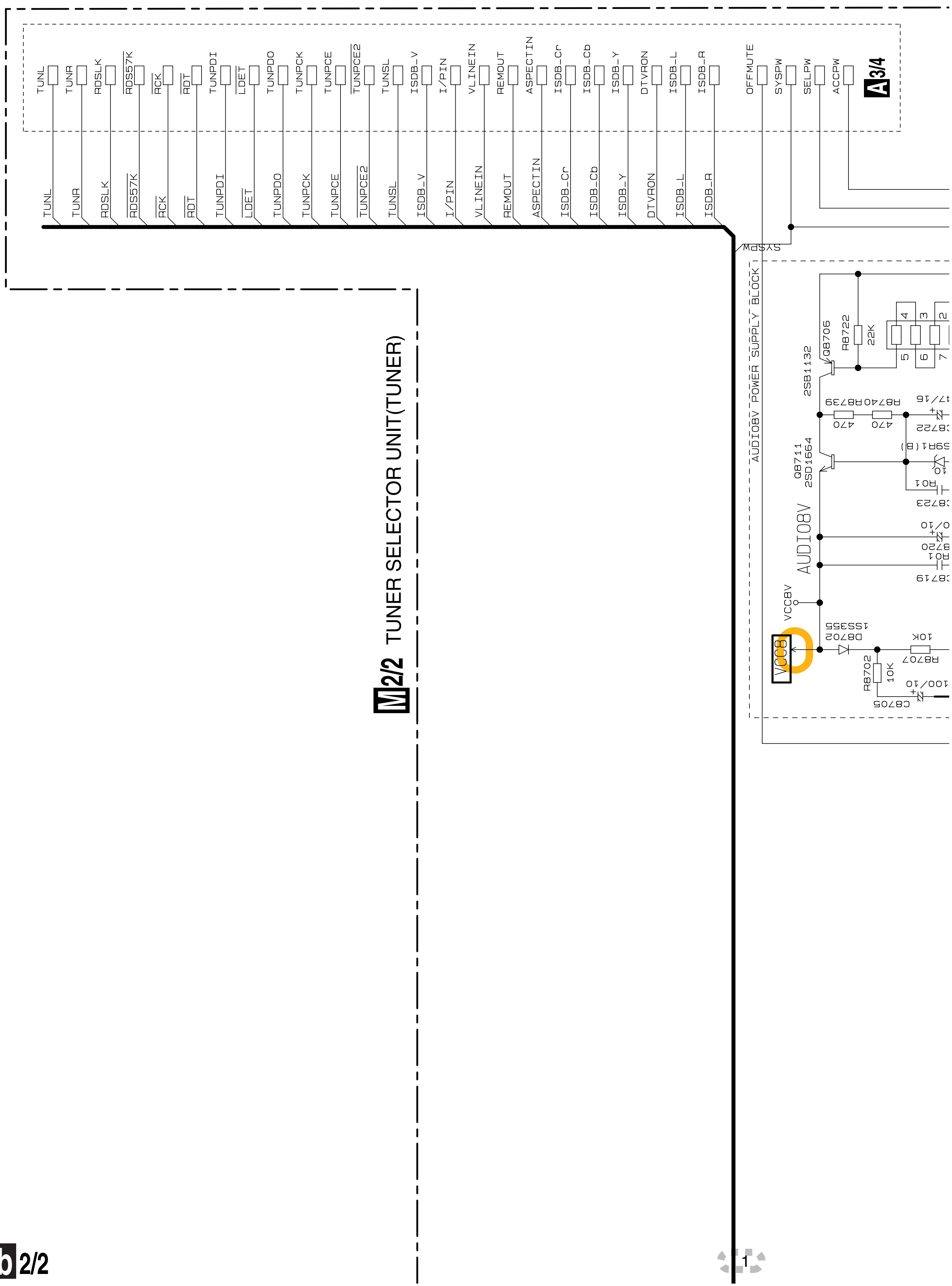
M-a 2/2

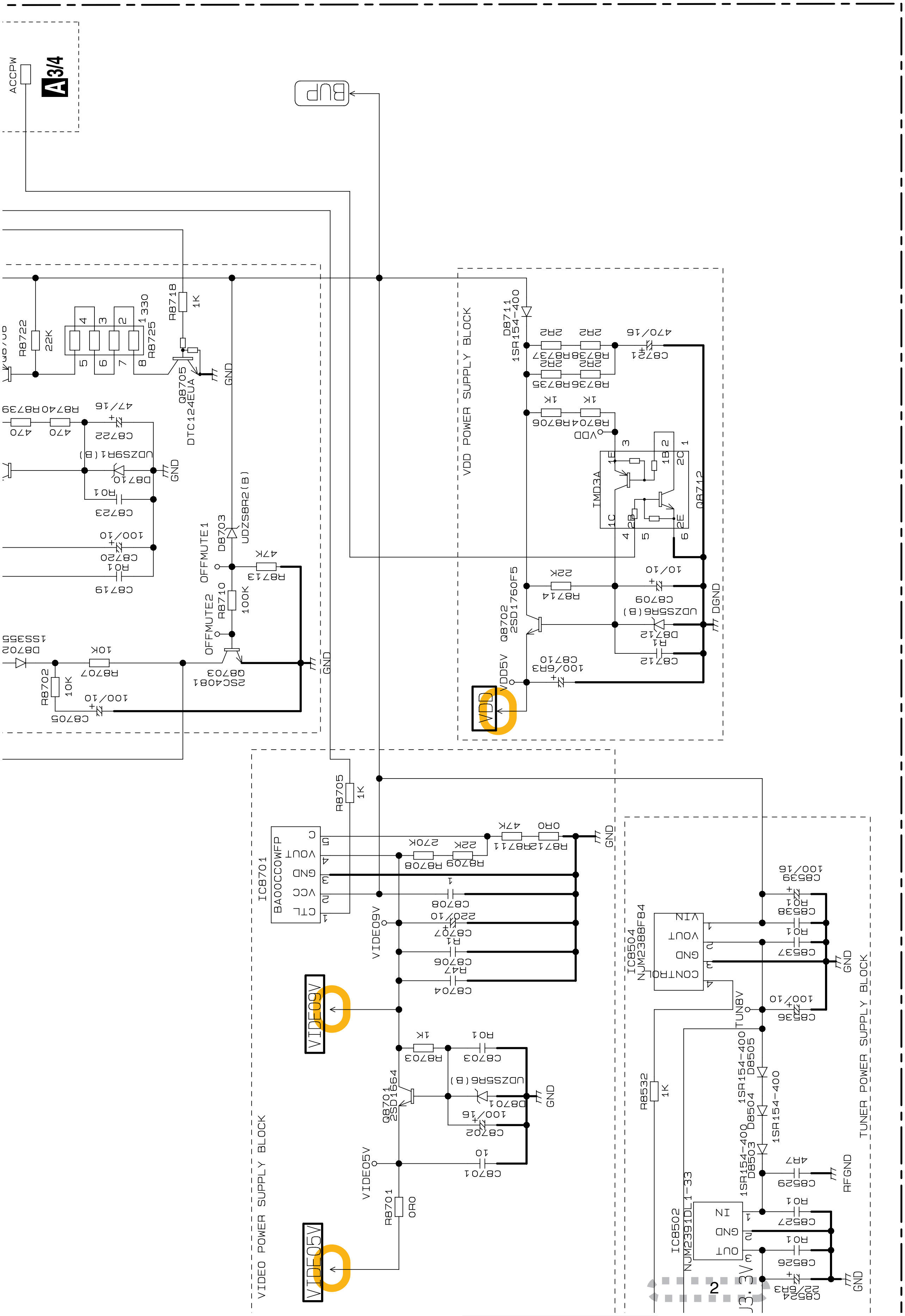


ACC5
R8560 100K
R8562 100K
R8556 100K
I/PIN
R8576 1K
VLINEIN
R8577 1K
ASPECTIN
TUNER
FM/AM TUNER UNIT X-2023
RCH
LCH
DIVER
RDSHSLK
RDSLOCK
RDSDATA
RDSCK
VDD
COMP
DGND
DO
ROMVDD
OSCGND
LDET
DI
CK
CE1
WC
CE2
SL
VCC
FMANT
RFGND
AMANT
TUN_R
TUN_L
TUNVDD
Q8502 2SA1576A
Q8507 2SA1576A
R8501 560
R8507 560
R8502 2R2K
R8511 2R2K
C8504 2200P
C8511 2200P
AGND
C8541 R47
R8527 12K
R8539 0R0
RFGND
C8517 R47
R8517 12K
R8521 82K
R8518 82K
C8545 47P
C8516 47P
C8512 R47
R8508 12K
IC8501 NJM4558MD
GND IN+1 IN-1 OUT1
IN+2 IN-2 OUT2 VCC
R8529 82K
C8547 47P
C8531 1
R8531 820
TUNL
R8523 680
C8533
D8501 UDZS5R6(B)
C8540 4R7
C8520 47P
R8522 82K
C8532 1
R8526 820
TUNR
HLDGND1
R8530 0R0
R8520 12K
C8518 R47
C8525 1
RDSLK
RDS57K
R8525 47K
RCK
RDT
TUNPDI
VDD
C8506 R01
C8508 47/10
C8507 R01
C8509 47/10
L8502
L8503
R8503 680
R8512 680
R8510 680
R8504 680
R8505 680
R8506 680
R8514 470
TUNPDO
TUNPCK
TUNPCE
TUNPCE2
TUNSL
SYSPW
TUN8V
L8504
L8501
C8510 R01
C8513 100/10
C8515 R1
C8521 R01
C8522 100/10
C8523 1
R8535 0R0
GND
HOLDER
Y8501 CWE1806
CN8502
ANT
ZNR8501 FCCA-201G31UA-PI
R8537 0R0
R8538 0R0
DGND
HOLDER GND
VIDEO POWER SUPP
VIDEO5V
R8701 0R0
IC8502 NJM2391DL1-33
OUT GND IN
TU3.3V
C8524 22/6R3
C8526 R01
C8527 R01
C8529


M-b 2/2
M 2/2 TUNER SELECTOR UNIT(TUNER)
TUNL
TUNR
RDSLK
RDS57K
RCK
RDT
TUNPDI
LDET
TUNPDO
TUNPCK
TUNPCE
TUNPCE2
TUNSL
ISDB_V
I/PIN
VLINEIN
REMOUT
ASPECTIN
ISDB_Cr
ISDB_Cb
ISDB_Y
DTVRON
ISDB_L
ISDB_R
OFFMUTE
SYSPW
SELPW
ACCPW
A 3/4
AUDIO8V POWER SUPPLY BLOCK
VCC8
VCC8V
AUDIO8V
Q8711
2SD1664
2SB1132
Q8706
D8702
1SS355
R8702
10K
C8705
100/10
R8707
10K
C8719
R01
C8720
100/10
C8723
R01
D8710
UDZS9R1(B)
C8722
47/16
470
R8740
R8739
470
R8722
22K
R8725
330
Q8705
DTC124EUA
R8718
1K
GND
2SC4081
Q8703
OFFMUTE2
OFFMUTE1
R8710
100K
D8703
UDZS8R2(B)
R8713
47K
VIDEO POWER SUPPLY BLOCK
IC8701
BA00CC0WFP
CTL
VCC
GND
VOUT
C
R8705
1K
VIDEO5V
VIDEO9V
R8701
0R0
Q8701
2SD1664
R8703
1K
C8701
10
C8702
100/16
D8701
UDZS5R6(B)
C8703
R01
C8704
R47
C8706
R1
C8707
220/10
C8708
1
R8709
R8708
22K
270K
R8711
R8712
47K
0R0
BUP
VDD POWER SUPPLY BLOCK
VDD
VDD5V
Q8702
2SD1760F5
D8711
1SR154-400
C8710
100/6R3
R8714
22K
R8706
R8704
1K
1K
R8735
R8736
R8737
R8738
2R2
C8721
470/16
IMD3A
Q8712
C8712
R1
D8712
UDZS5R6(B)
C8709
10/10
DGND
TUNER POWER SUPPLY BLOCK
R8532
1K
IC8504
NJM2388F84
CONTROL
GND
VOUT
VIN
IC8502
NJM2391DL1-33
OUT
GND
IN
TU3.3V
TUN8V
D8503
D8504
D8505
1SR154-400
C8524
22/6R3
C8526
R01
C8527
R01
C8529
4R7
C8536
100/10
C8537
R01
C8538
R01
C8539
100/16
RFGND

M 2/2


A 3/4
TUNL
TUNR
RDSLK
RDS57K
RCK
RDT
TUNPDI
LDET
TUNPDO
TUNPCK
TUNPCE
TUNPCE2
TUNSL
ISDB_V
I/PIN
VLINEIN
REMOUT
ASPECTIN
ISDB_Cr
ISDB_Cb
ISDB_Y
DTVRON
ISDB_L
ISDB_R
OFFMUTE
SYSPW
SELPW
ACCPW
M 2/2 TUNER SELECTOR UNIT(TUNER)
AUDIO8V POWER SUPPLY BLOCK
Q8706
2SB1132
R8722
22K
R8739
R8740
470
470
Q8711
2SD1664
AUDIO8V
VCC8V
VCC8
D8702
1SS355
R8707
10K
R8702
10K
C8705
100/10
C8722
C8723
C8720
C8719
1



A 3/4
ACCPW
BUP
VDD POWER SUPPLY BLOCK
D8711 1SR154-400
R8737 R8738 2R2
R8735 R8736 2R2
C8721 470/16
R8704 R8706 1K
VDD
IMD3A
Q8712
C8709 10/10
R8714 22K
Q8702 2SD1760F5
D8712 UDZS5R6(B)
C8712 R1
C8710 100/6R3
VDD5V
VDD
DGND
R8718 1K
R8725 330
R8722 22K
Q8705 DTC124EUA
GND
R8740 R8739 470
C8722 47/16
D8710 UDZS9R1(B)
C8723 R01
C8720 100/10
C8719 R01
D8703 UDZS8R2(B)
OFFMUTE1
OFFMUTE2
R8710 100K
R8713 47K
Q8703 2SC4081
R8707 10K
R8702 10K
D8702 1SS355
C8705 100/10
VIDEO POWER SUPPLY BLOCK
R8705 1K
IC8701 BA00CC0WFP
CTL VCC GND VOUT C
R8711 47K
R8712 0R0
R8708 270K
R8709 22K
C8708 1
C8707 220/10
C8706 R47
C8704
VIDEO9V
VIDEO9V
R8703 1K
C8703 R01
Q8701 2SD1664
D8701 UDZS5R6(B)
C8702 100/16
C8701 10
VIDEO5V
R8701 0R0
VIDEO5V
TUNER POWER SUPPLY BLOCK
IC8504 NJM2388F84
VIN VOUT GND CONTROL
C8539 100/16
C8538 R01
C8537 R01
C8536 100/10
TUNBV
R8532 1K
D8505 1SR154-400
D8504 1SR154-400
D8503 1SR154-400
C8529 4R7
RFGND
IC8502 NJM2391DL1-33
IN GND OUT
C8527 R01
C8526 R01
C8524 2R3
J3.3V
2

M-a M-b

A
B
C
D
E
F

M-b 2/2

A

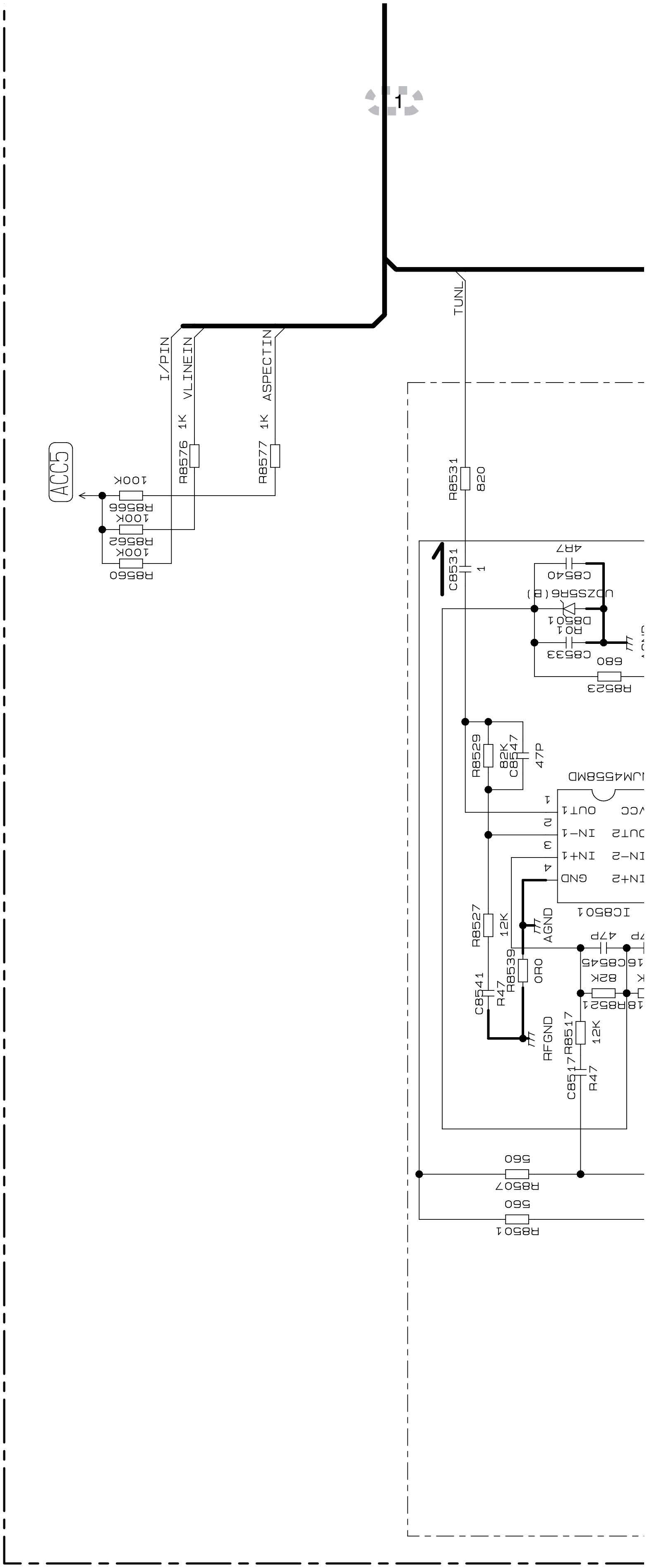
M-b 2/2

B

C

M-b
M-a

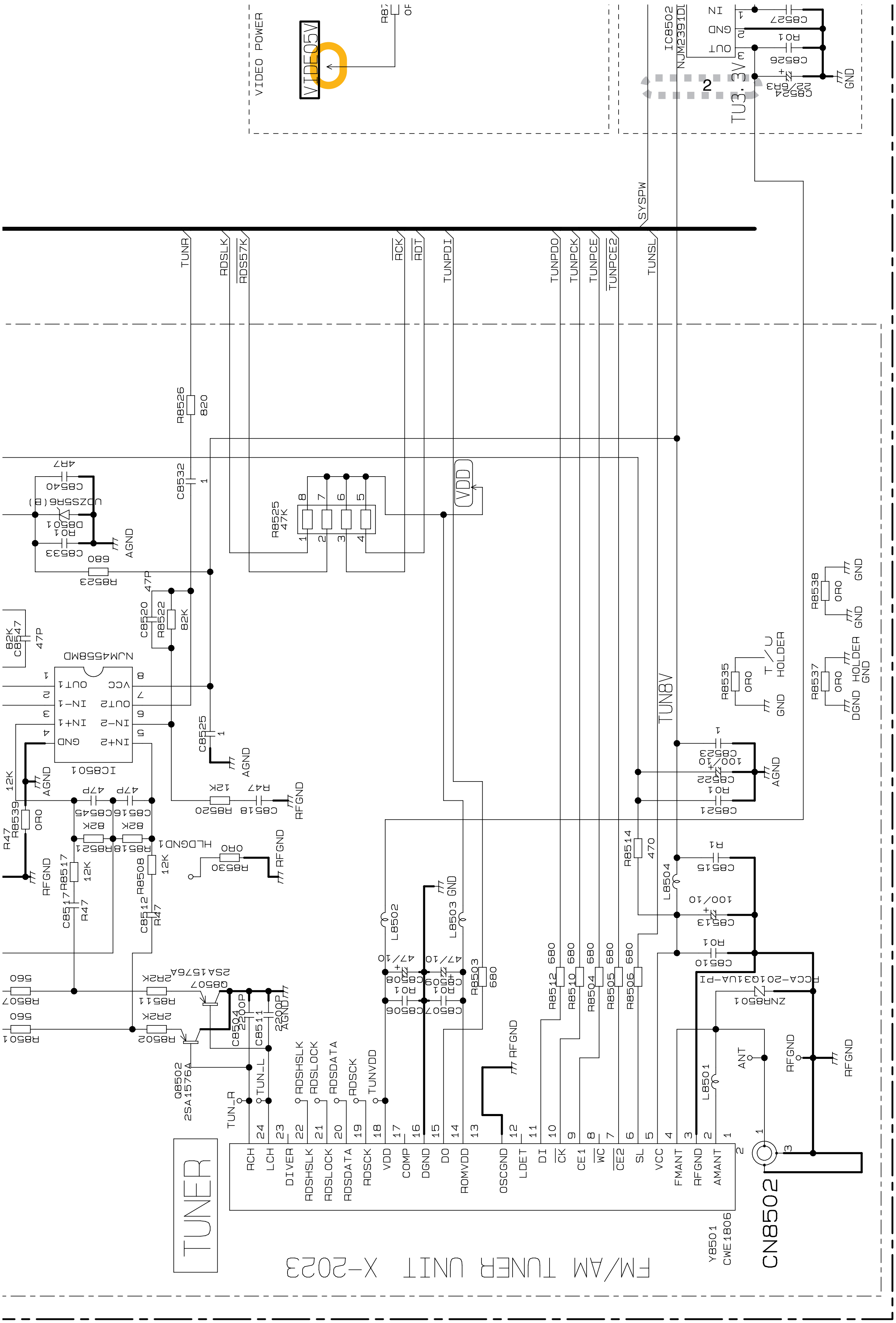
D


1
TUNL
I/PIN
VLINEIN
ASPECTIN
R8576 1K
R8577 1K
ACC5
100K
R8566
100K
R8562
100K
R8560
R8531
820
C8531
1
1
4R7
C8540
UDZS5R6(B)
D8501
R01
C8533
680
R8523
R8529
82K
C8547
47P
NJM4558MD
1
2
3
4
OUT1
IN-1
IN+1
GND
VCC
OUT2
IN-2
IN+2
IC8501
AGND
R8527
12K
R8539
0R0
47P
C8545
82K
R8521
C8541
R47
RFGND
R8517
12K
C8517
R47
560
R8507
560
R8501

E

F

M-a 2/2


FM/AM TUNER UNIT X-2023
TUNER
CN8502
Y8501
CWE1806
IC8501
NJM4558MD
IC8502
NJM2391DL
VIDEO POWER
VIDEO5V
TU3.3V
TUN8V
SYSPW
TUNR
RDSLK
RDS57K
RCK
RDT
TUNPDI
TUNPDO
TUNPCK
TUNPCE
TUNPCE2
TUNSL
VDD
RCH
LCH
DIVER
RDSHSLK
RDSLOCK
RDSDATA
RDSCK
VDD
COMP
DGND
DO
ROMVDD
OSCGND
LDET
DI
CK
CE1
WC
CE2
SL
VCC
FMANT
RFGND
AMANT
TUN_R
TUN_L
RDSHSLK
RDSLOCK
RDSDATA
RDSCK
TUNVDD
ANT
RFGND
AGND
HLDGND1
GND
T/U HOLDER
HOLDER GND
DGND
Q8502
2SA1576A
Q8507
2SA1576A
ZNR8501
RCA-201031UA-PI
R8525
47K
R8526
820
C8532
R8522
82K
C8520
47P
R8523
680
C8540
4R7
D8501
UDZS5R6(B)
C8533
R01
C8525
R8520
12K
C8518
R47
R8538
R8537
R8535
0R0
C8523
100/10
C8522
C8521
R8514
470
L8504
C8515
R1
C8513
C8510
L8501
L8502
L8503
R8503
680
R8512
R8510
R8504
R8505
R8506
C8508
C8506
C8509
C8507
47/10
C8504
2200P
C8511
R8501
R8502
R8507
R8511
560
2R2K
R8517
R8518
R8521
R8539
R8508
R8530
C8517
C8512
C8545
C8516
C8547
C8524
C8526
C8527
2

M-b 2/2

M-a 2/2

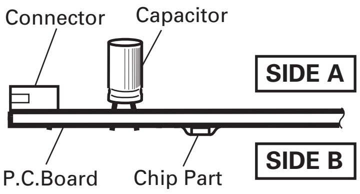
M-a M-b

11. PCB CONNECTION DIAGRAM

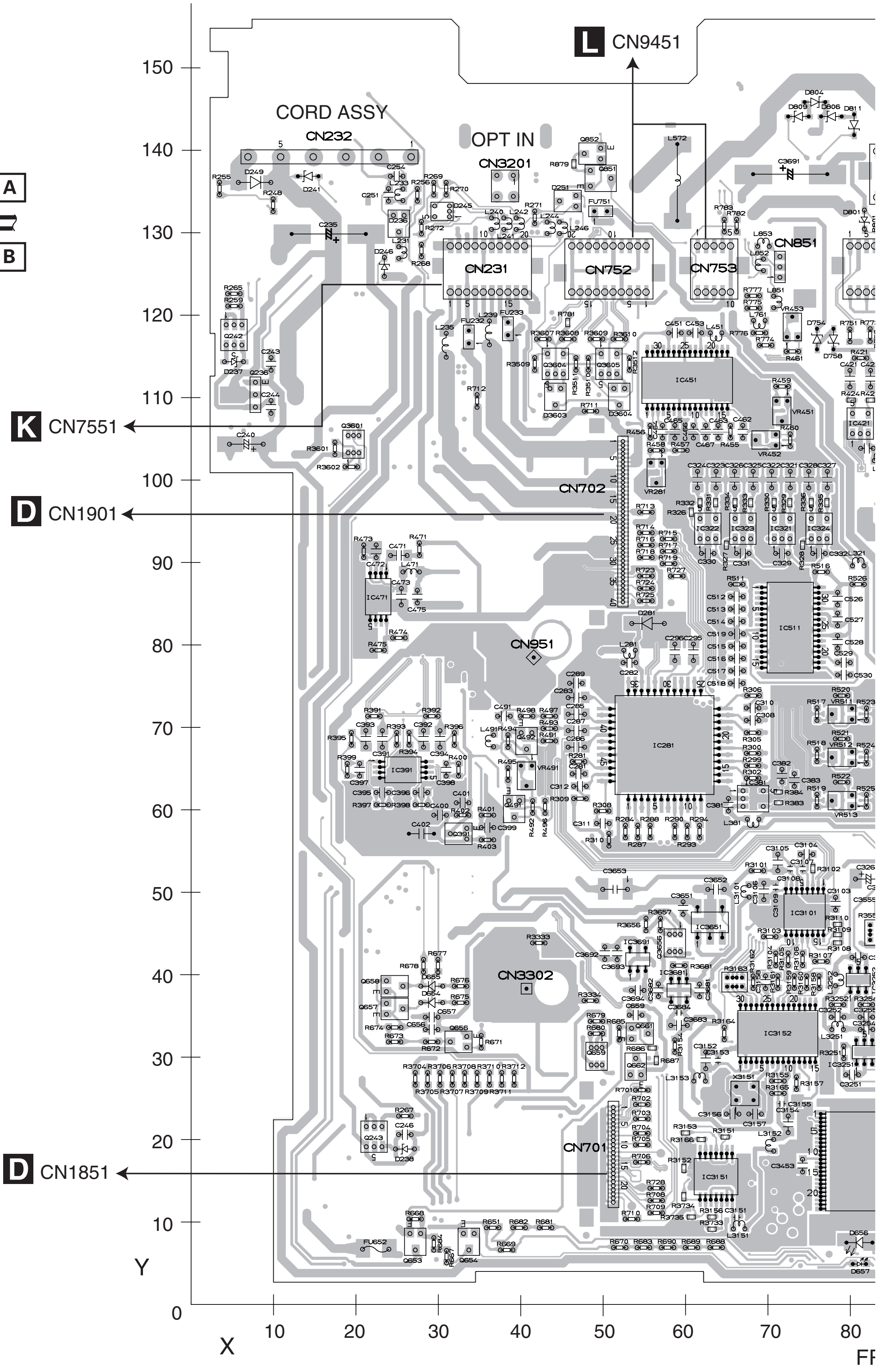
11.1 DVD MOTHER UNIT

NOTE FOR PCB DIAGRAMS

1. The parts mounted on this PCB include all necessary parts for several destination.
   For further information for respective destinations, be sure to check with the schematic diagram.
2. Viewpoint of PCB diagrams

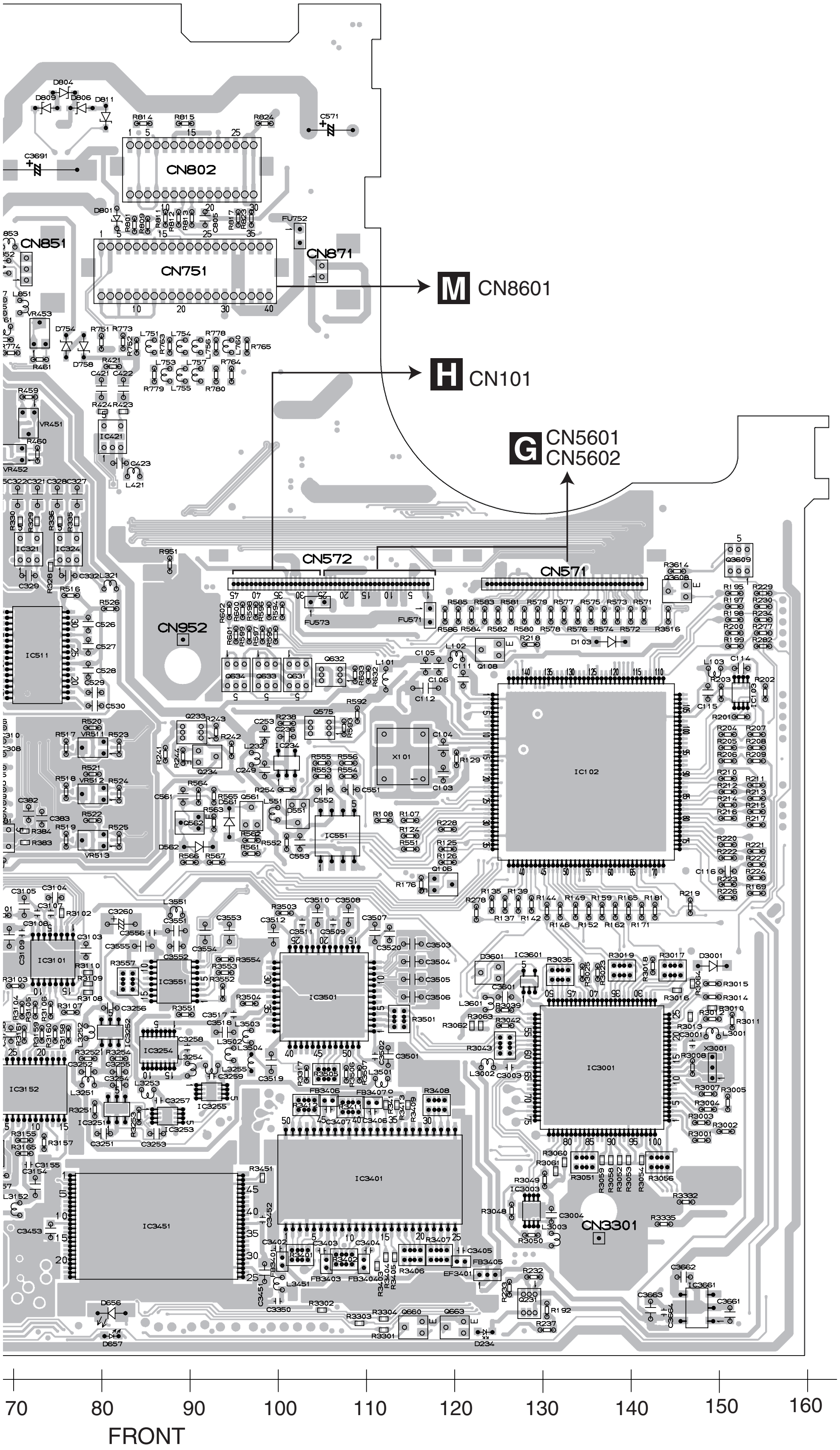

Connector
Capacitor
SIDE A
P.C.Board
Chip Part
SIDE B

A DVD MOTHER UNIT


L CN9451
CORD ASSY
CN232
OPT IN
CN3201
CN231
CN752
CN753
CN851
K CN7551
D CN1901
CN702
IC451
IC471
CN951
IC511
IC281
IC391
IC3101
IC3651
CN3302
IC3152
IC3151
CN701
D CN1851
150
140
130
120
110
100
90
80
70
60
50
40
30
20
10
0
Y
X
10
20
30
40
50
60
70
80

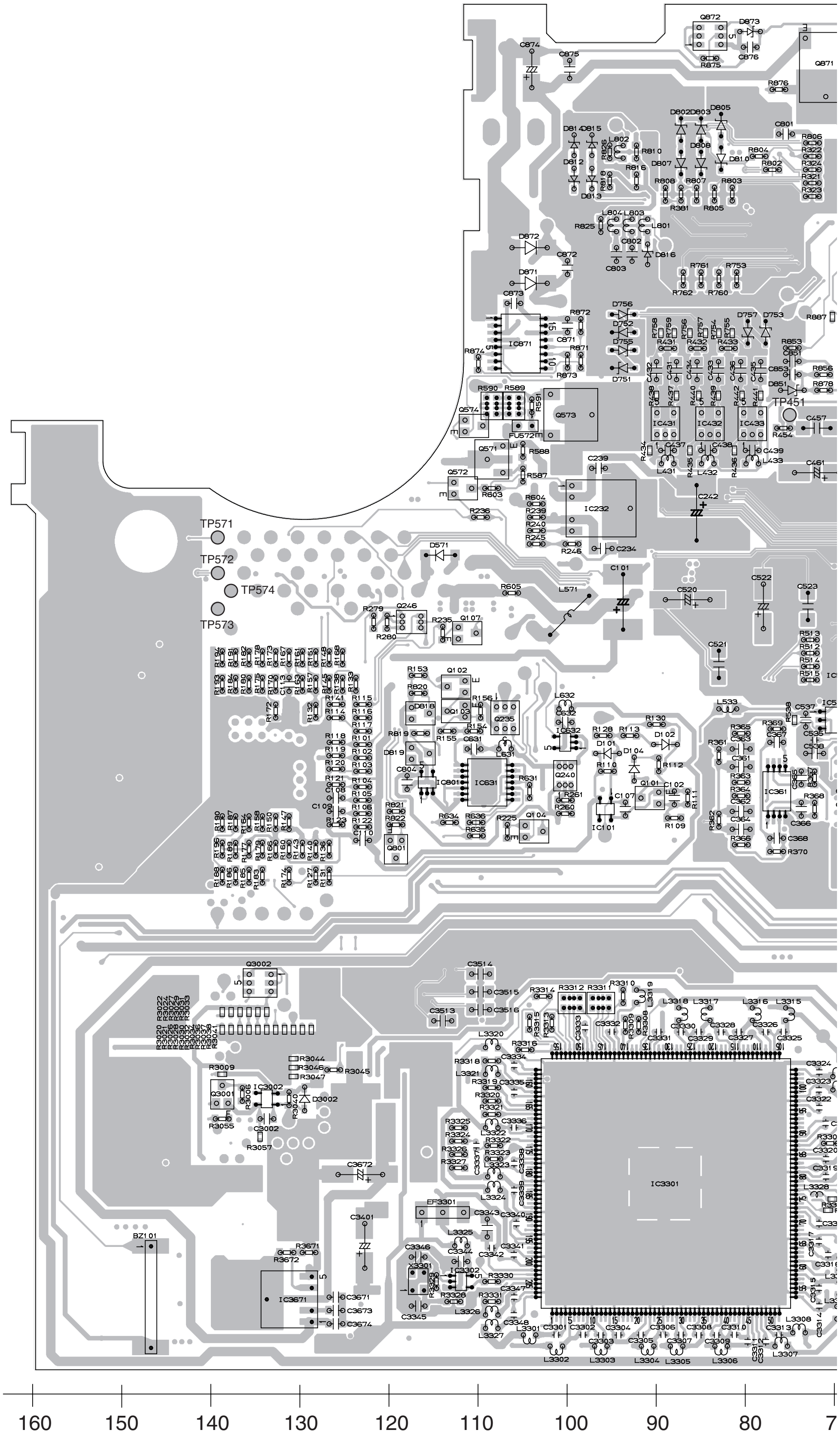
A

SIDE A

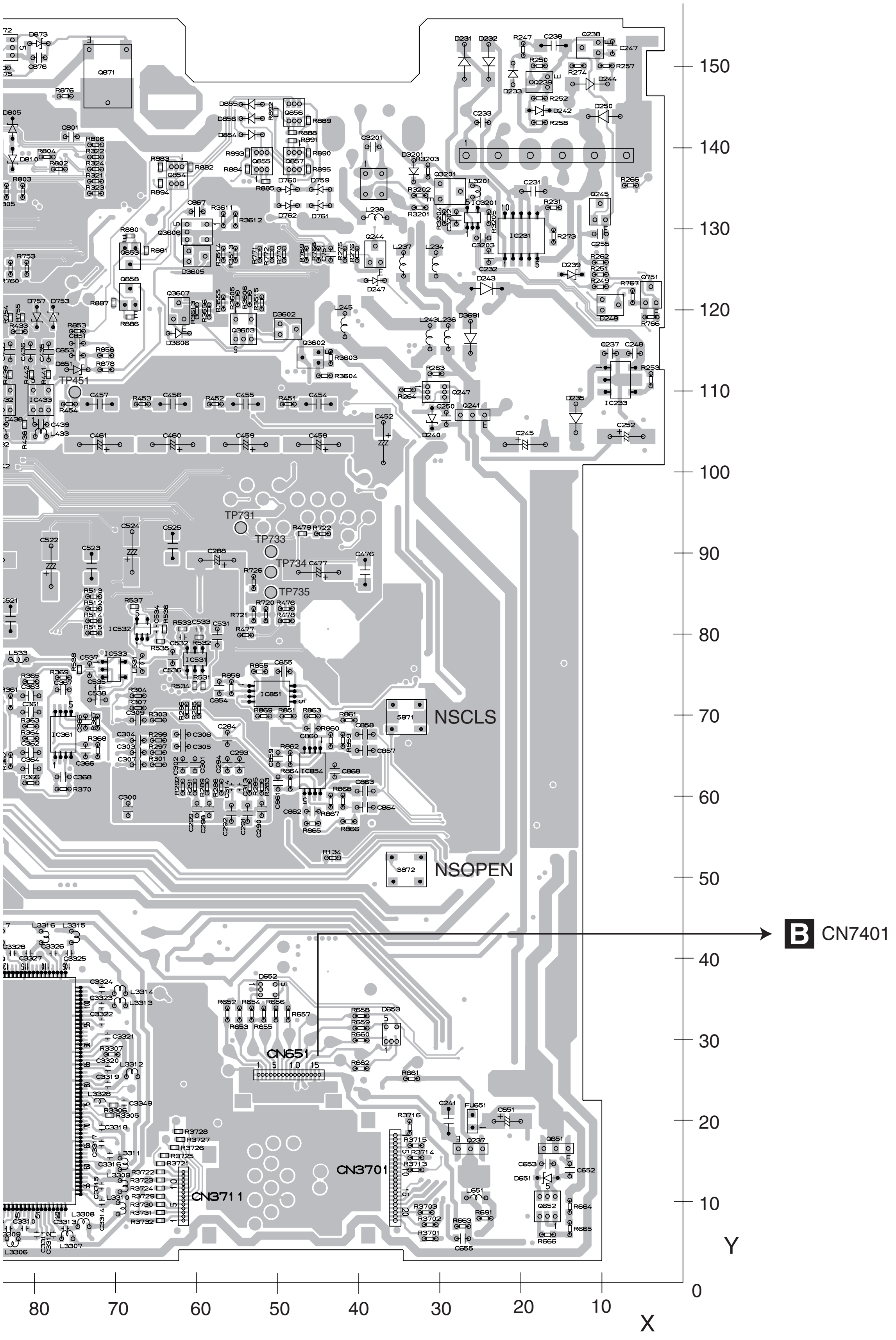

M CN8601
H CN101
G CN5601
CN5602
CN802
CN751
CN851
CN871
CN572
CN571
CN952
CN3301
IC102
IC3001
IC3401
IC3451
IC3501
IC511
IC551
IC3101
IC3152
70
80
90
100
110
120
130
140
150
160
FRONT

A

A DVD MOTHER UNIT


TP571
TP572
TP574
TP573
TP451
IC871
IC232
IC431
IC432
IC433
IC631
IC801
IC101
IC361
IC3301
IC3002
IC3671
IC3302
Q872
Q871
Q573
Q574
Q571
Q572
Q246
Q107
Q102
Q103
Q235
Q240
Q101
Q104
Q801
Q3002
Q3001
BZ101
EF3301
X3301
C101
C520
C522
C523
C242
C3672
C3401
160
150
140
130
120
110
100
90
80

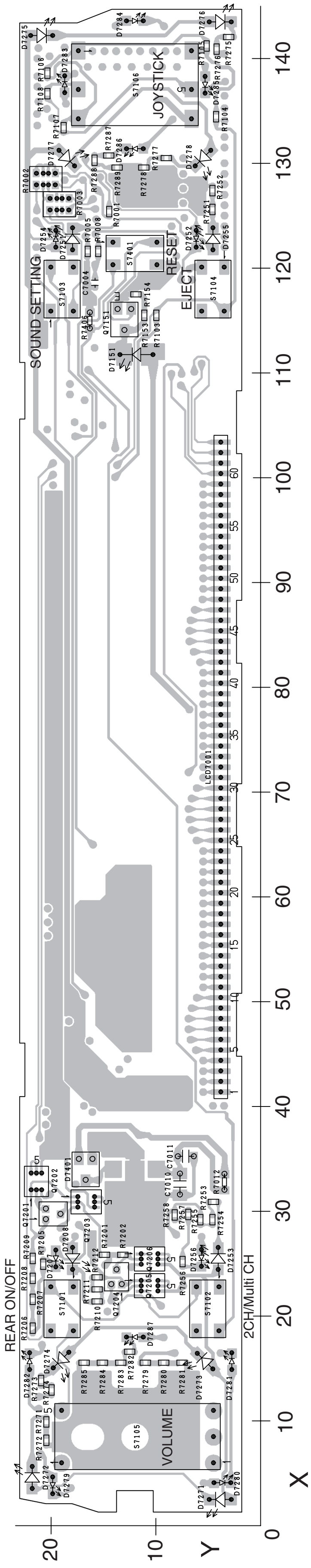
SIDE B


NSCLS
NSOPEN
B CN7401
CN651
CN3701
CN3711
IC231
IC233
IC851
IC854
IC531
IC532
IC533
IC361
IC433
Q871
TP451
TP731
TP733
TP734
TP735
150
140
130
120
110
100
90
80
70
60
50
40
30
20
10
0
Y
80
70
60
50
40
30
20
10
X

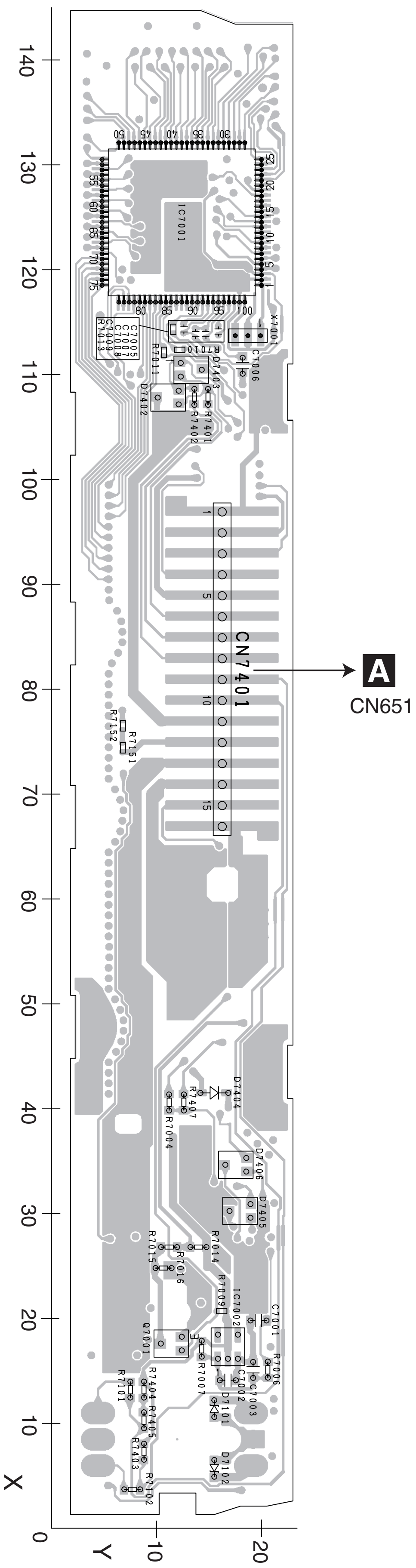
A

11.2 KEYBOARD UNIT

B KEYBOARD UNIT **SIDE A**


JOYSTICK
S7106
SOUND SETTING
S7103
RESET
S7401
EJECT
S7104
LCD7001
REAR ON/OFF
S7101
2CH/Multi CH
S7102
VOLUME
S7105
140
130
120
110
100
90
80
70
60
50
40
30
20
10
X
20
10
Y
0

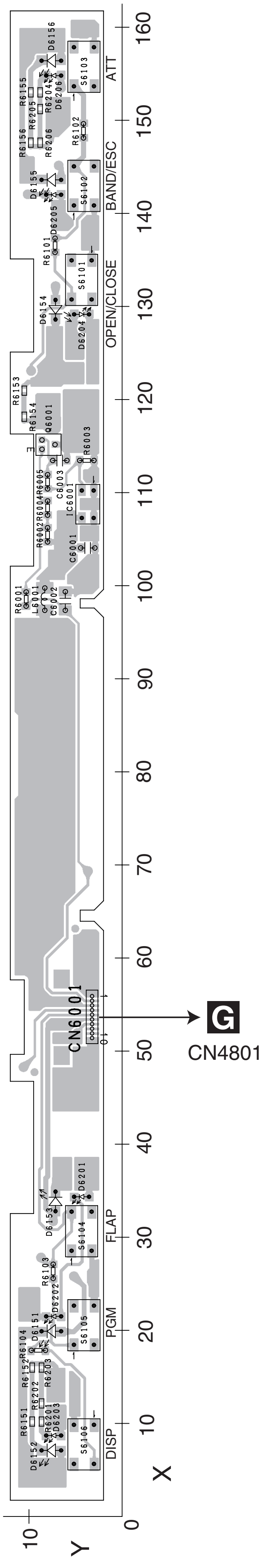
B KEYBOARD UNIT **SIDE B**


IC7001
X7001
CN7401
A
CN651
IC7002
Q7001
D7404
D7405
D7406
140
130
120
110
100
90
80
70
60
50
40
30
20
10
X
0
Y
10
20

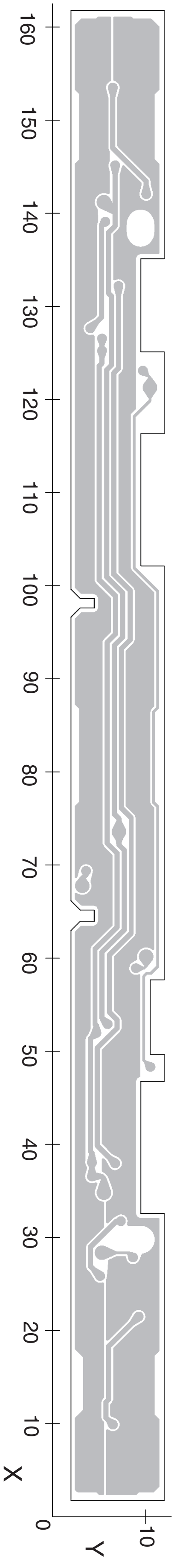
B

11.3 SUB KEYBOARD UNIT

C SUB KEYBOARD UNIT **SIDE A**


160
150
140
130
120
110
100
90
80
70
60
50
40
30
20
10
0
X
Y
10
ATT
BAND/ESC
OPEN/CLOSE
FLAP
PGM
DISP
D6156
S6103
R6155
R6205
R6204
D6206
R6156
R6206
R6102
D6155
S6102
D6205
R6101
S6101
D6154
D6204
R6153
R6154
Q6001
E
R6003
R6005
C6003
R6004
IC6001
R6002
C6001
R6001
L6001
C6002
CN6001
1
10
G
CN4801
D6201
D6153
S6104
R6103
D6202
D6151
S6105
R6104
R6152
R6202
R6203
R6151
R6201
D6203
D6152
S6106

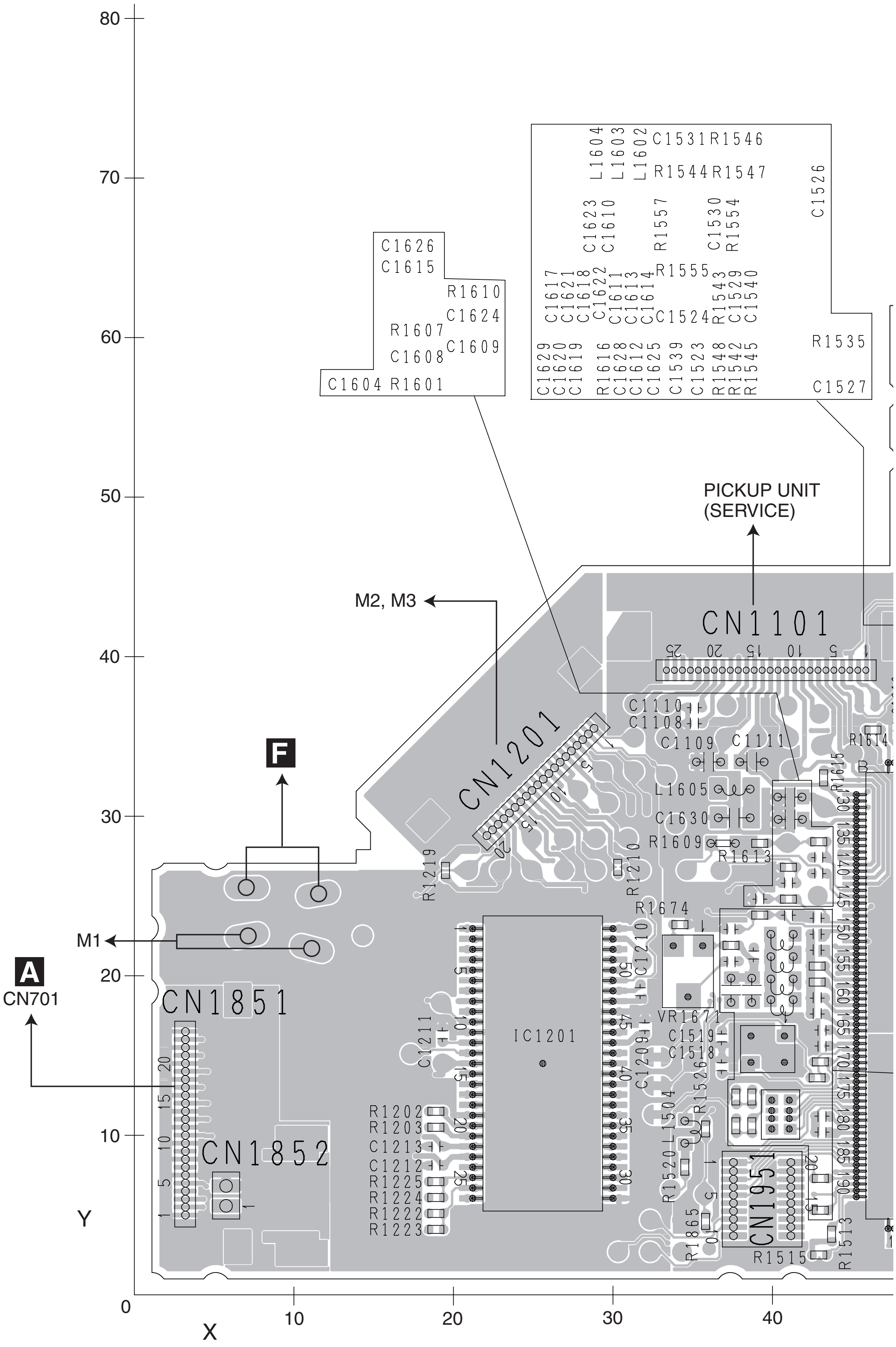
C SUB KEYBOARD UNIT **SIDE B**


160
150
140
130
120
110
100
90
80
70
60
50
40
30
20
10
0
X
Y
10

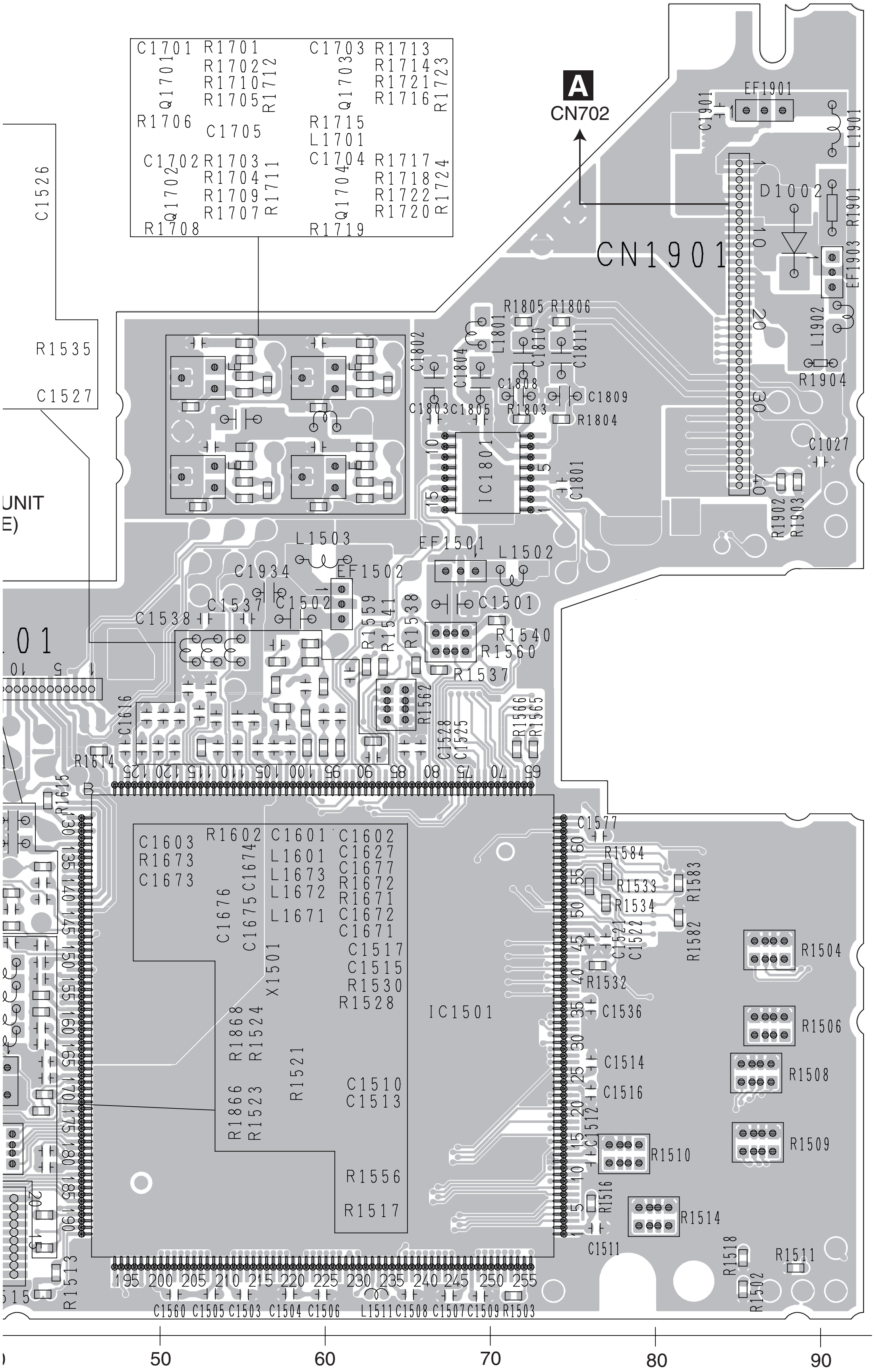
C

11.4 DVD CORE UNIT

D DVD CORE UNIT


80
70
60
50
40
30
20
10
0
Y
X
10
20
30
40
C1626
C1615
R1610
C1624
R1607
C1609
C1608
C1604 R1601
L1604 L1603 L1602 C1531 R1546
R1544 R1547
C1526
C1623 C1610
R1557
C1530 R1554
R1555
C1617 C1621 C1618 C1622 C1611 C1613 C1614 C1524 R1543 C1529 C1540
C1629 C1620 C1619 R1616 C1628 C1612 C1625 C1539 C1523 R1548 R1542 R1545
R1535
C1527
PICKUP UNIT (SERVICE)
M2, M3
CN1101
CN1201
F
C1110
C1108
C1109
C1111
R1614
R1615
L1605
C1630
R1609
R1613
R1219
R1210
R1674
C1210
M1
A
CN701
CN1851
CN1852
IC1201
C1211
C1209
VR1671
C1519
C1518
R1526
L1504
R1202
R1203
C1213
C1212
R1225
R1224
R1222
R1223
R1520
R1865
CN1951
R1515
R1513

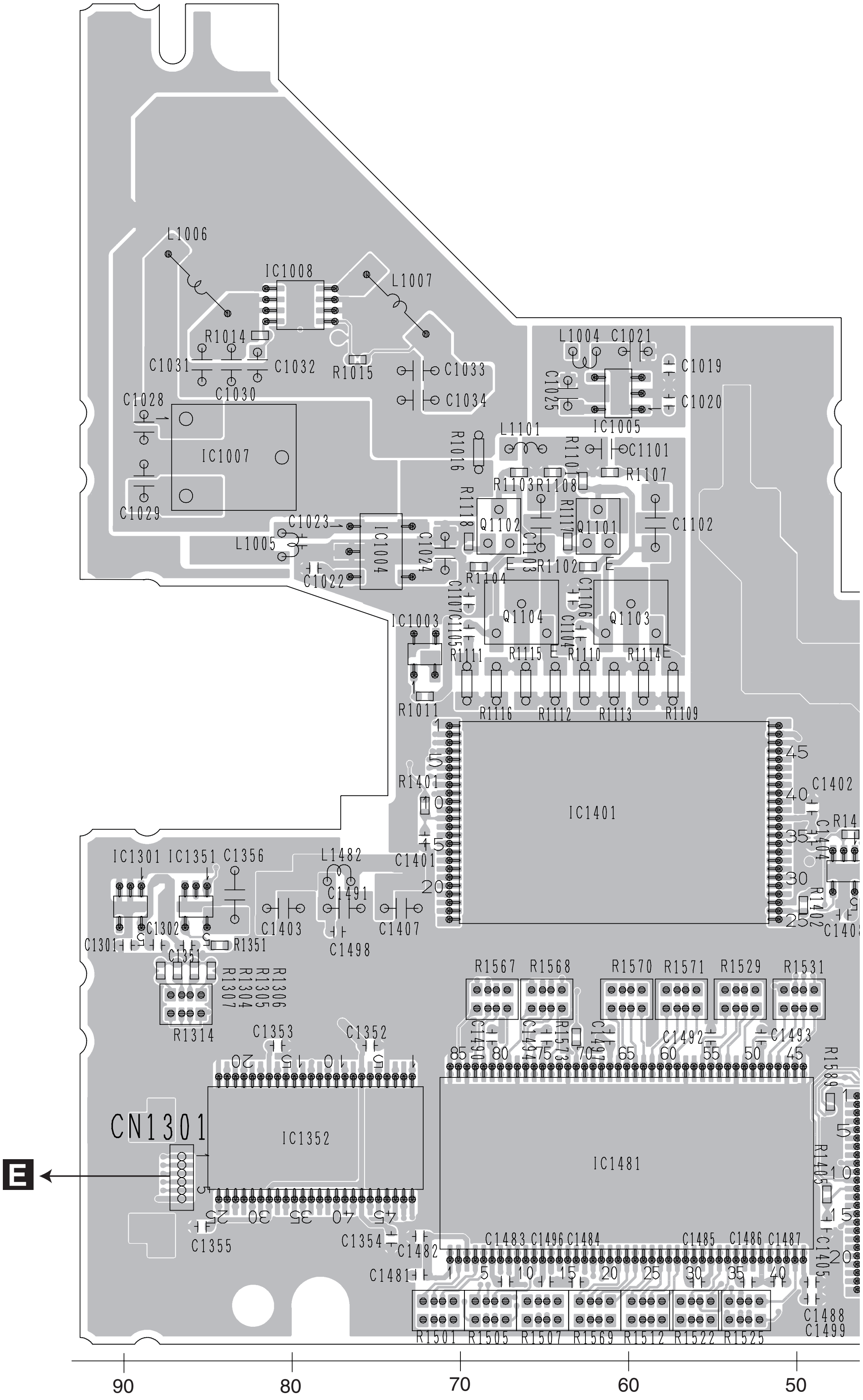
SIDE A


A
CN702
CN1901
EF1901
C1901
L1901
D1002
R1901
EF1903
L1902
R1904
C1027
R1902
R1903
10
20
30
40
C1701 R1701 C1703 R1713
Q1701 R1702 R1712 Q1703 R1714 R1723
R1710 R1721
R1705 R1716
R1706 C1705 R1715
L1701
C1702 R1703 C1704 R1717
Q1702 R1704 R1711 Q1704 R1718 R1724
R1709 R1722
R1707 R1720
R1708 R1719
C1526
R1535
C1527
UNIT
E)
R1805 R1806
C1802
L1801
C1804
C1810
C1811
C1808
C1809
C1803 C1805 R1803
R1804
IC1801
C1801
L1503
EF1501
L1502
C1934
EF1502
C1537 C1502
C1501
C1538
R1559
R1541
R1538
R1540
R1560
R1537
01
C1616
R1562
C1528
C1525
R1566
R1565
R1614
R1615
125 120 115 110 105 100 95 90 85 80 75 70 65
C1577
R1584
R1533
R1583
R1534
C1521
C1522
R1582
R1504
R1532
C1536
R1506
C1514
R1508
C1516
C1512
R1510
R1509
R1516
R1514
C1511
R1518
R1511
R1502
C1603 R1602 C1601 C1602
R1673 L1601 C1627
C1673 C1674 L1673 C1677
L1672 R1672
C1676 C1675 R1671
L1671 C1672
C1671
X1501 C1517
C1515
R1530
R1528
IC1501
R1868 R1524
R1521
C1510
R1866 R1523 C1513
R1556
R1517
60 55 50 45 40 35 30 25 20 15 10 5 1
130 135 140 145 150 155 160 165 170 175 180 185 190
195 200 205 210 215 220 225 230 235 240 245 250 255
C1560 C1505 C1503 C1504 C1506 L1511 C1508 C1507 C1509 R1503
R1513
515
50
60
70
80
90

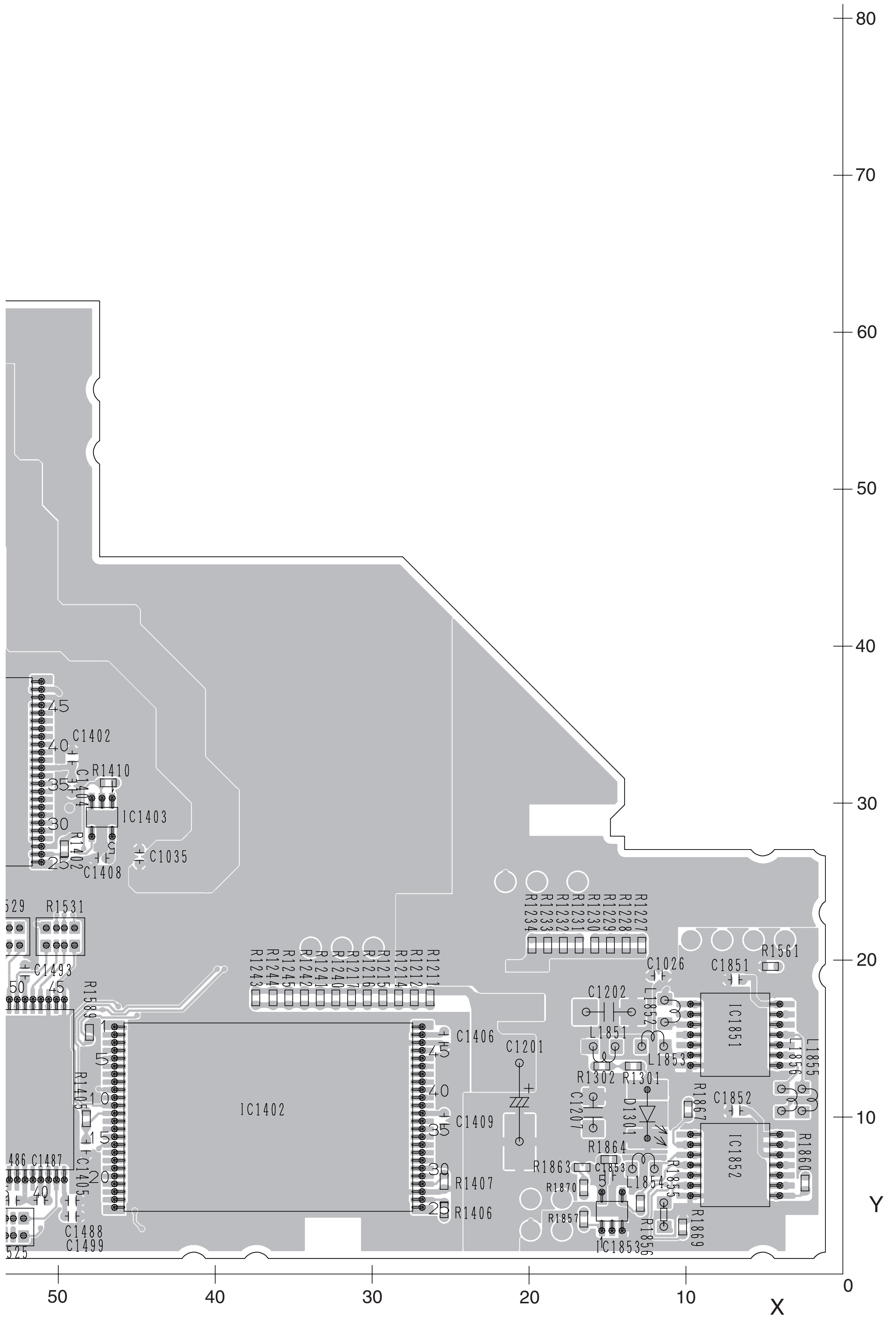
A
B
C
D
E
F

D

D DVD CORE UNIT

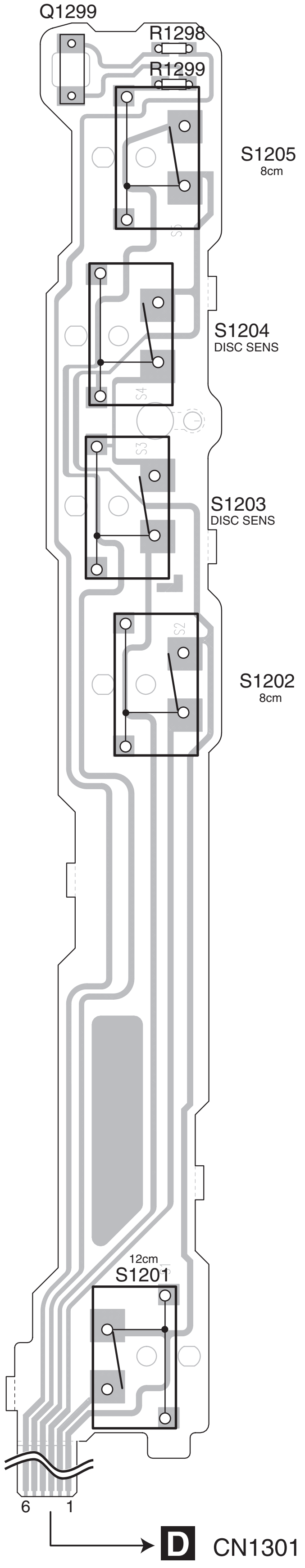

L1006
IC1008
L1007
R1014
C1031
C1032
C1030
R1015
C1033
C1034
L1004
C1021
C1019
C1025
C1020
IC1005
C1028
IC1007
C1029
R1016
L1101
R1101
C1101
R1107
R1103
R1108
R1118
R1117
Q1102
C1103
Q1101
C1102
C1023
L1005
IC1004
C1024
C1022
R1104
R1102
C1107
C1105
C1106
C1104
Q1104
Q1103
IC1003
R1111
R1115
R1110
R1114
R1011
R1116
R1112
R1113
R1109
R1401
IC1401
C1402
C1404
R1402
C1401
C1408
IC1301
IC1351
C1356
L1482
C1491
C1403
C1407
C1498
C1301
C1302
C1351
R1351
R1304
R1305
R1306
R1307
R1314
R1567
R1568
R1570
R1571
R1529
R1531
C1490
C1494
R1573
C1497
C1492
C1493
R1589
C1353
C1352
CN1301
IC1352
IC1481
R1403
C1405
E
C1355
C1354
C1482
C1481
C1483
C1496
C1484
C1485
C1486
C1487
C1488
C1499
R1501
R1505
R1507
R1569
R1512
R1522
R1525
90
80
70
60
50

SIDE B

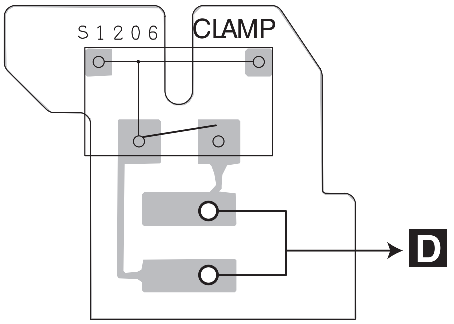

80
70
60
50
40
30
20
10
0
Y
X
50
40
30
20
10
IC1402
IC1403
IC1851
IC1852
IC1853
C1402
C1404
C1405
C1406
C1408
C1409
C1035
C1026
C1201
C1202
C1207
C1487
C1488
C1493
C1499
C1851
C1852
C1853
R1402
R1405
R1406
R1407
R1410
R1531
R1561
R1589
R1211
R1212
R1214
R1215
R1216
R1217
R1240
R1241
R1242
R1243
R1244
R1245
R1227
R1228
R1229
R1230
R1231
R1232
R1233
R1234
R1301
R1302
R1855
R1856
R1857
R1860
R1863
R1864
R1867
R1869
R1870
L1851
L1852
L1853
L1854
L1855
L1856
D1301
1
5
10
15
20
25
30
35
40
45
50

11.5 COMPOUND UNIT(A), COMPOUND UNIT(B)

E COMPOUND UNIT(A)


Q1299
R1298
R1299
S1205
8cm
S1204
DISC SENS
S1203
DISC SENS
S1202
8cm
12cm
S1201
6
1
D
CN1301

F COMPOUND UNIT(B)

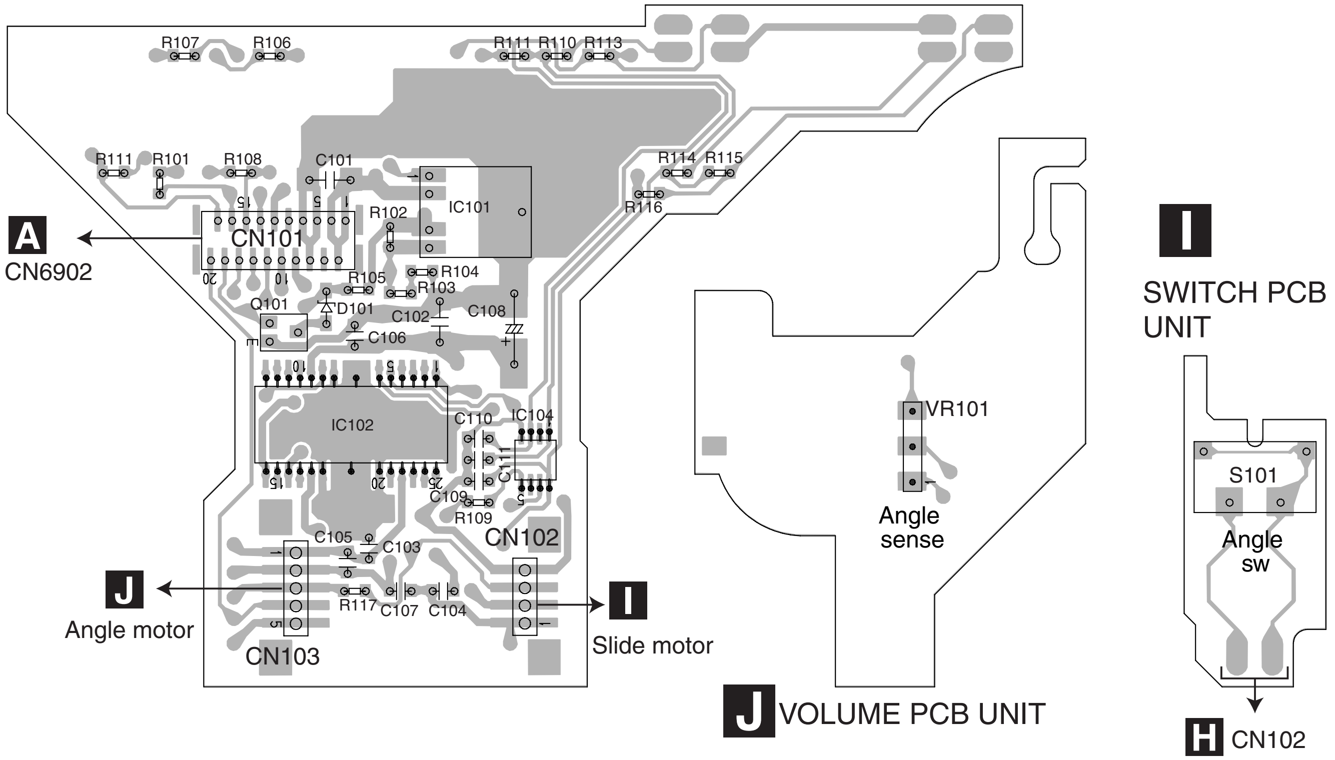

S1206
CLAMP
D

E F

11.6 DRIVE UNIT

H MAIN PCB UNIT(SERVICE)

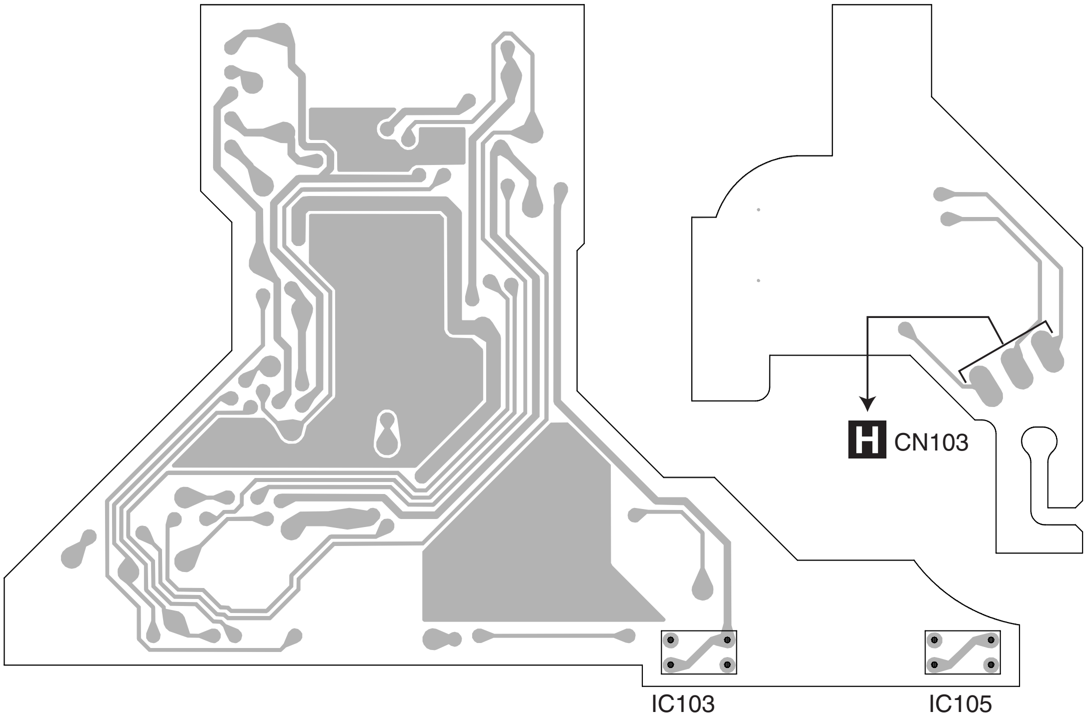
SIDE A


R107
R106
R111 R110 R113
R111
R101
R108
C101
15
5
1
R102
IC101
A
CN6902
CN101
20
10
R105
R104
R103
Q101
D101
C102
C108
C106
E
10
5
1
IC102
C110
IC104
C111
15
20
25
C109
5
R109
CN102
C105
C103
J
Angle motor
R117
C107
C104
5
CN103
I
Slide motor
R114 R115
R116
VR101
Angle sense
J VOLUME PCB UNIT
I
SWITCH PCB UNIT
S101
Angle sw
H CN102

SIDE B

H MAIN PCB UNIT(SERVICE)

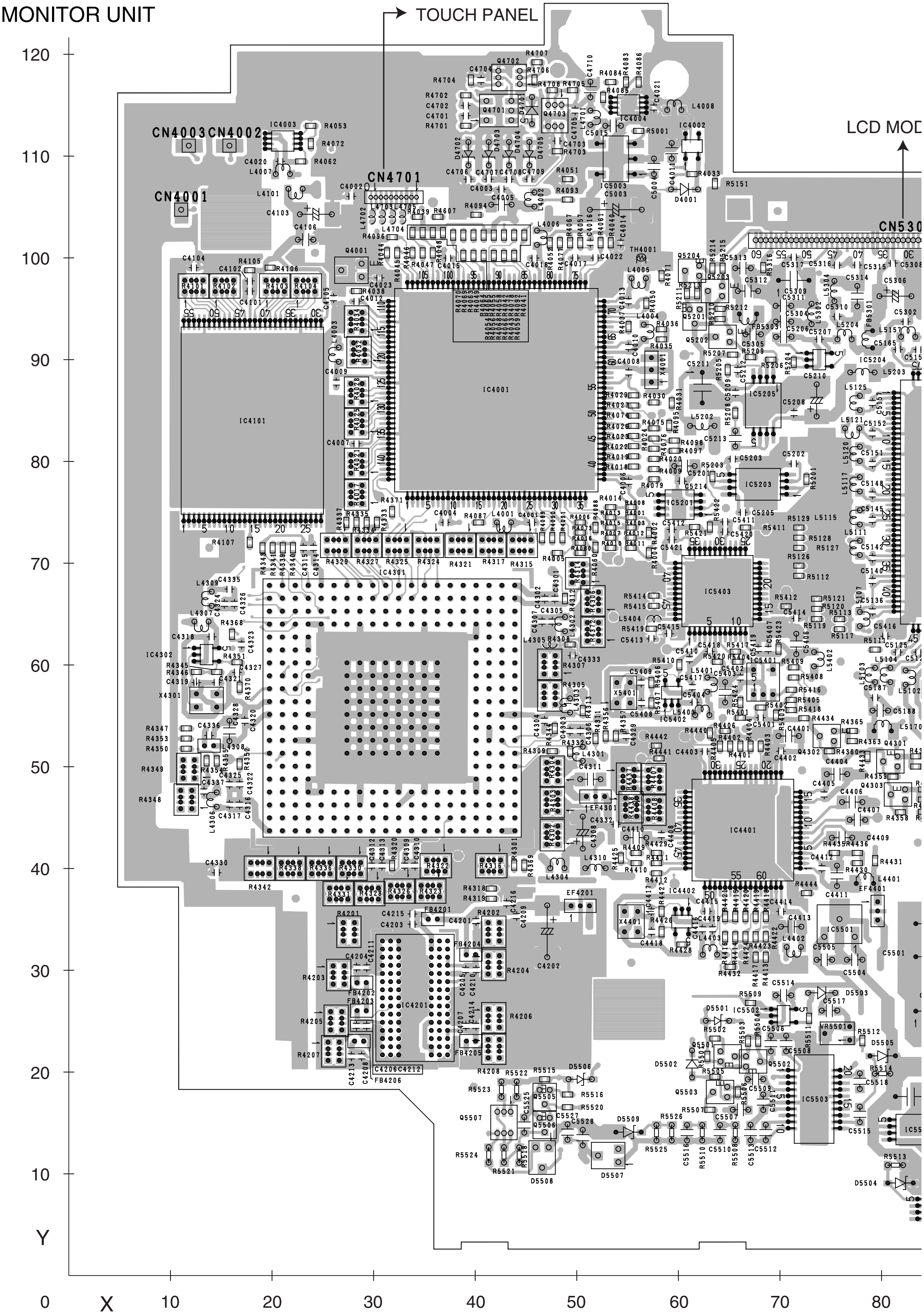
J VOLUME PCB UNIT


H CN103
IC103
IC105

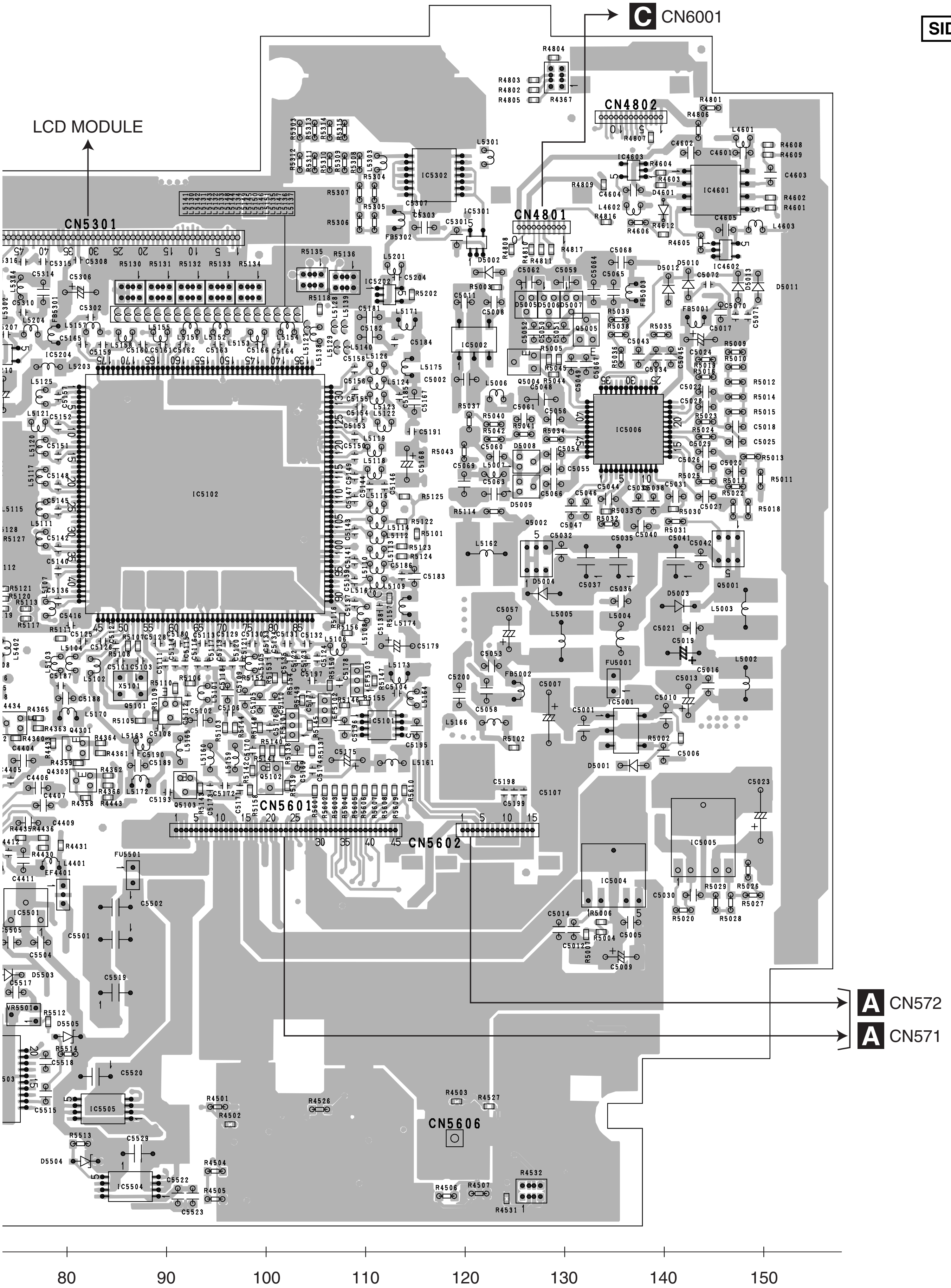
H I J

11.7 MONITOR UNIT

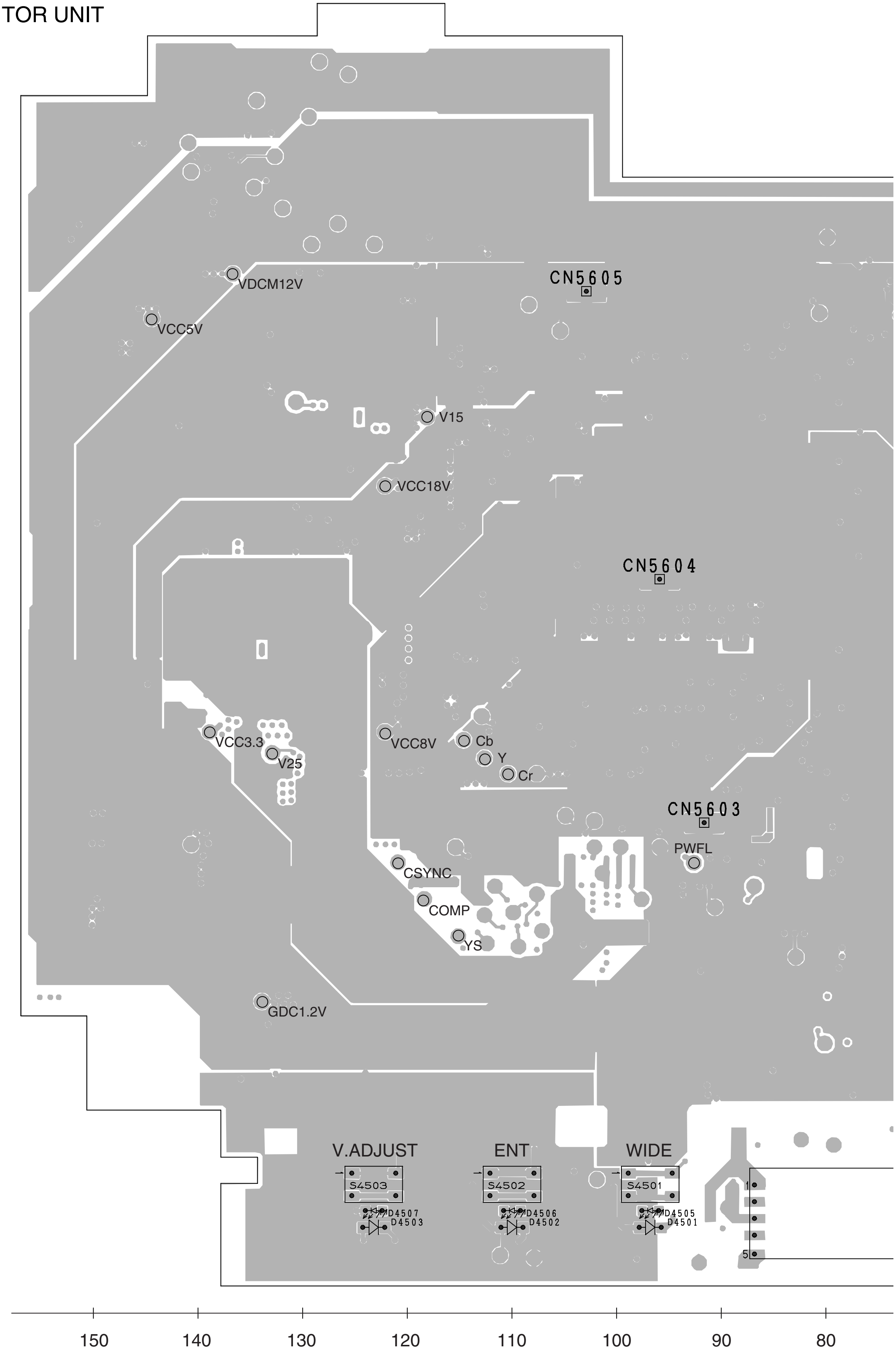
G MONITOR UNIT


TOUCH PANEL
LCD MOD
CN4003
CN4002
CN4001
CN4701
CN530
IC4001
IC4101
IC4301
IC4201
IC4401
IC5403
IC5203
IC5205
IC5501
IC5503
IC4002
IC4003
IC4004
IC4302
120
110
100
90
80
70
60
50
40
30
20
10
Y
0
X
10
20
30
40
50
60
70
80

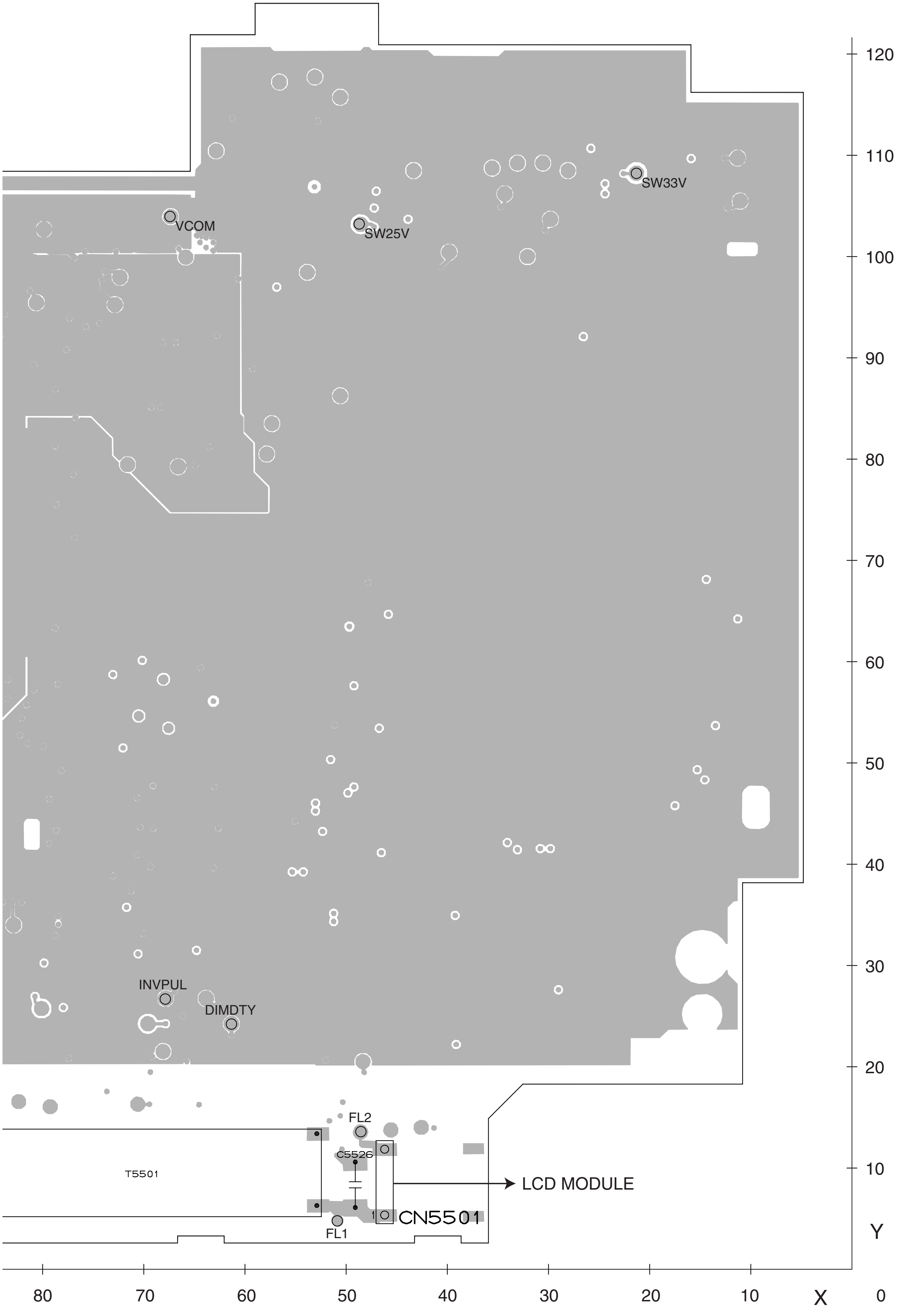
SIDE A


C CN6001
LCD MODULE
CN5301
CN4802
CN4801
IC5302
IC5301
IC4603
IC4601
IC4602
IC5202
IC5204
IC5102
IC5002
IC5006
IC5101
IC5001
IC5005
IC5004
IC5501
IC5505
IC5504
X5101
CN5601
CN5602
CN5606
A CN572
A CN571
FU5501
FU5001
EF4401
VR5501
80
90
100
110
120
130
140
150

G MONITOR UNIT


VDCM12V
VCC5V
CN5605
V15
VCC18V
CN5604
VCC3.3
V25
VCC8V
Cb
Y
Cr
CN5603
PWFL
CSYNC
COMP
YS
GDC1.2V
V.ADJUST
ENT
WIDE
S4503
S4502
S4501
D4507
D4503
D4506
D4502
D4505
D4501
1
5
150
140
130
120
110
100
90
80

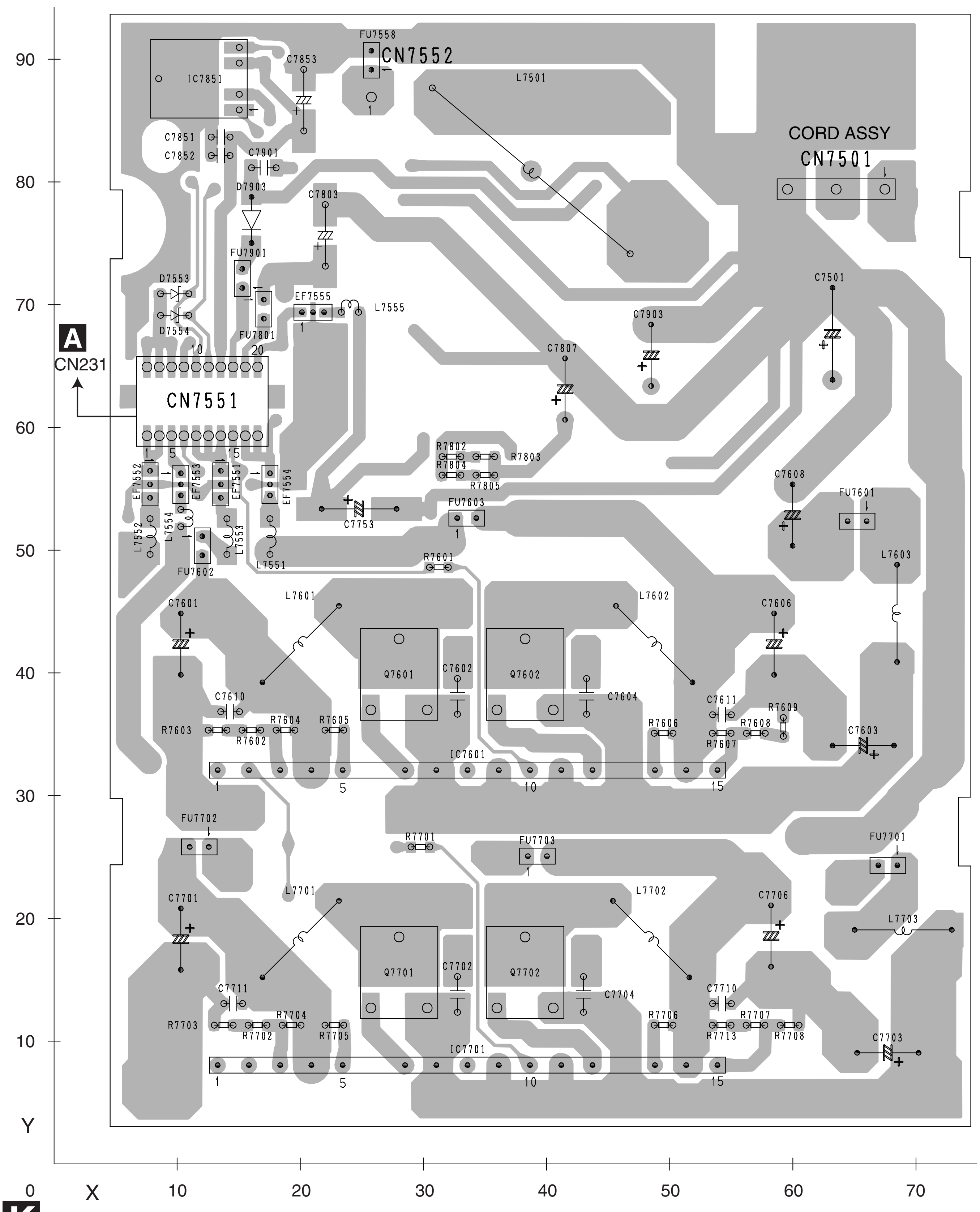
SIDE B


VCOM
SW25V
SW33V
INVPUL
DIMDTY
FL2
C5526
T5501
FL1
CN5501
LCD MODULE
Y
X

11.8 POWER SUPPLY UNIT

K POWER SUPPLY UNIT

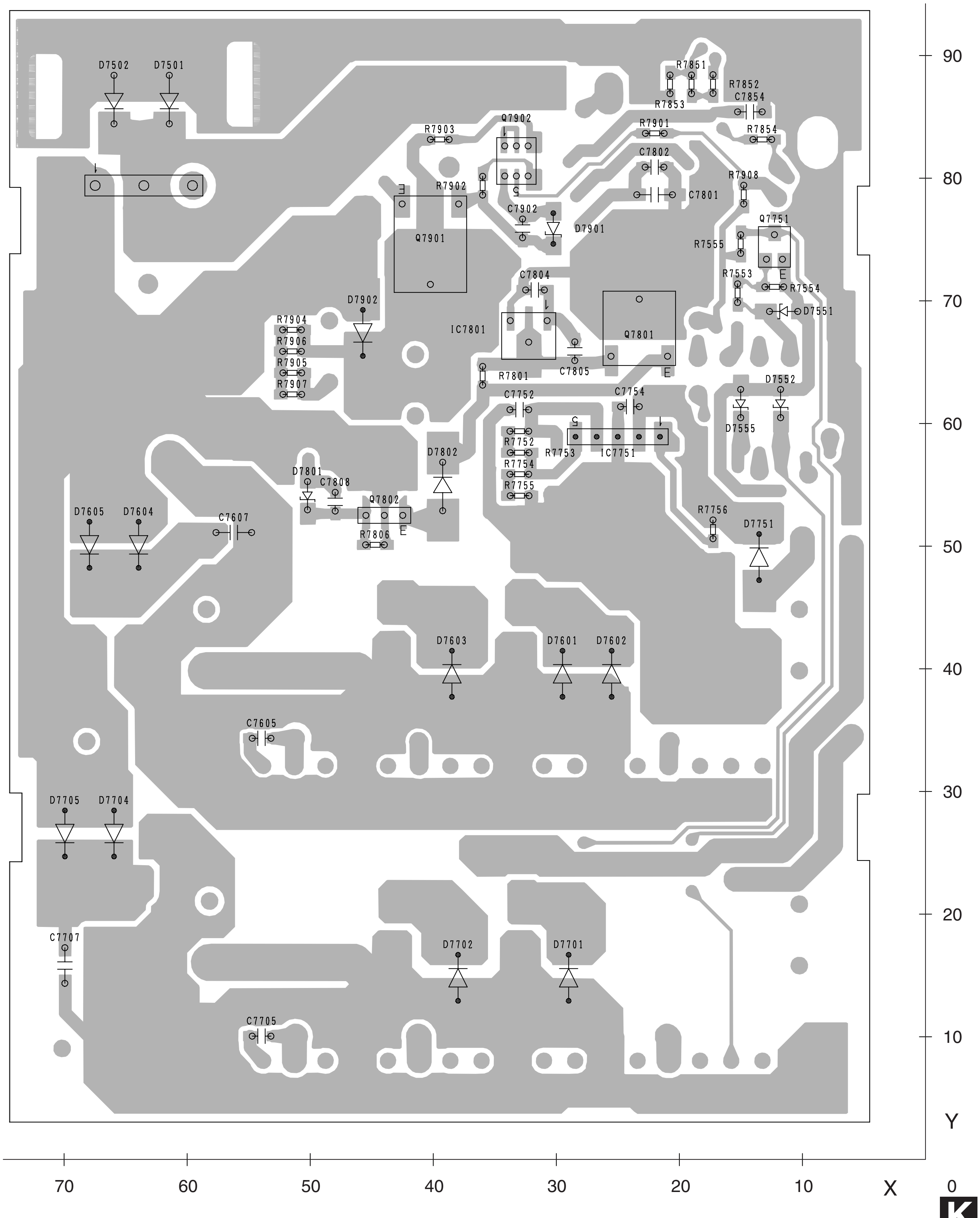
SIDE A


A
CN231
CORD ASSY
CN7501
CN7551
CN7552
FU7558
IC7851
C7853
C7851
C7852
C7901
D7903
C7803
FU7901
FU7801
D7553
D7554
EF7555
L7555
L7501
C7501
C7903
C7807
R7802
R7803
R7804
R7805
C7753
FU7603
C7608
FU7601
L7603
EF7552
EF7553
EF7551
EF7554
L7552
L7554
L7553
L7551
FU7602
R7601
C7601
L7601
Q7601
C7602
Q7602
C7604
L7602
C7606
C7610
R7603
R7602
R7604
R7605
R7606
C7611
R7609
R7608
R7607
C7603
IC7601
FU7702
R7701
FU7703
FU7701
C7701
L7701
L7702
C7706
L7703
Q7701
C7702
Q7702
C7704
C7711
R7703
R7702
R7704
R7705
R7706
C7710
R7707
R7713
R7708
C7703
IC7701
1
5
10
15
20
90
80
70
60
50
40
30
20
10
Y
0
X
10
20
30
40
50
60
70

K

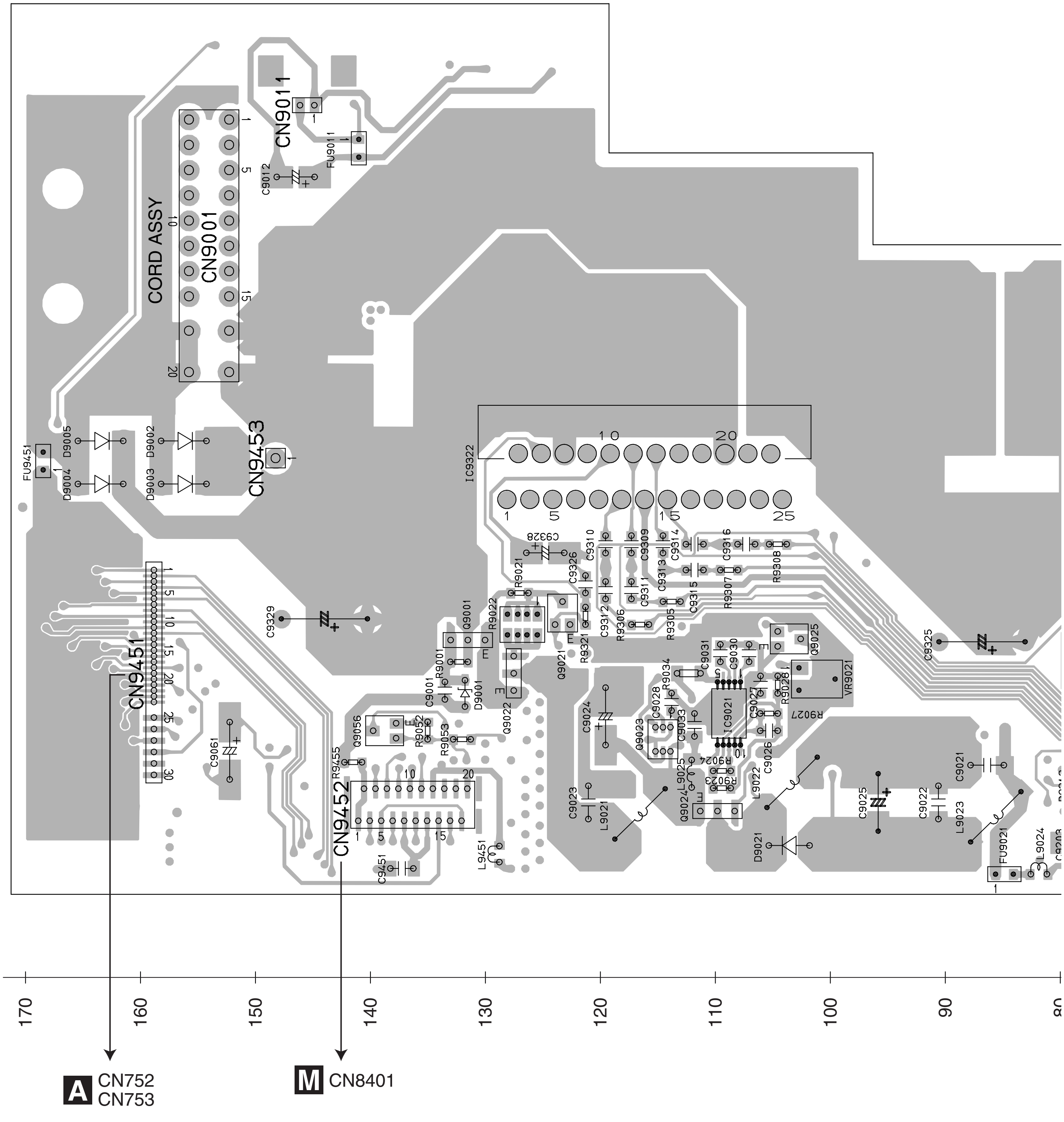
K POWER SUPPLY UNIT

SIDE B


D7502
D7501
R7851
R7852
R7853
C7854
R7901
R7854
R7903
Q7902
C7802
R7908
C7801
R7902
Q7901
C7902
D7901
Q7751
R7555
R7553
R7554
C7804
D7551
D7902
R7904
R7906
R7905
R7907
IC7801
Q7801
R7801
C7805
D7552
C7752
C7754
D7555
R7752
R7753
IC7751
R7754
R7755
D7802
D7801
C7808
Q7802
R7806
R7756
D7751
D7605
D7604
C7607
D7603
D7601
D7602
C7605
D7705
D7704
C7707
D7702
D7701
C7705
E
5
90
80
70
60
50
40
30
20
10
Y
70
60
50
40
30
20
10
X
0

11.9 AMP UNIT

L AMP UNIT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FU9011
C9012
FU9451
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D9004
D9002
D9003
CN9453
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C9310
C9309
C9314
C9316
R9308
C9313
R9307
C9326
R9021
C9311
C9312
C9315
R9306
R9305
R9022
Q9001
R9321
Q9021
C9329
C9325
CN9451
C9061
R9001
C9001
D9001
Q9022
C9024
R9034
C9031
C9030
Q9025
VR9021
R9028
C9027
R9027
C9028
C9033
IC9021
Q9023
C9026
R9024
R9023
L9025
Q9024
L9022
Q9056
R9052
R9053
R9455
CN9452
C9451
L9451
C9023
L9021
D9021
C9025
C9022
C9021
L9023
FU9021
L9024
170
160
150
140
130
120
110
100
90
80
A CN752
CN753
M CN8401

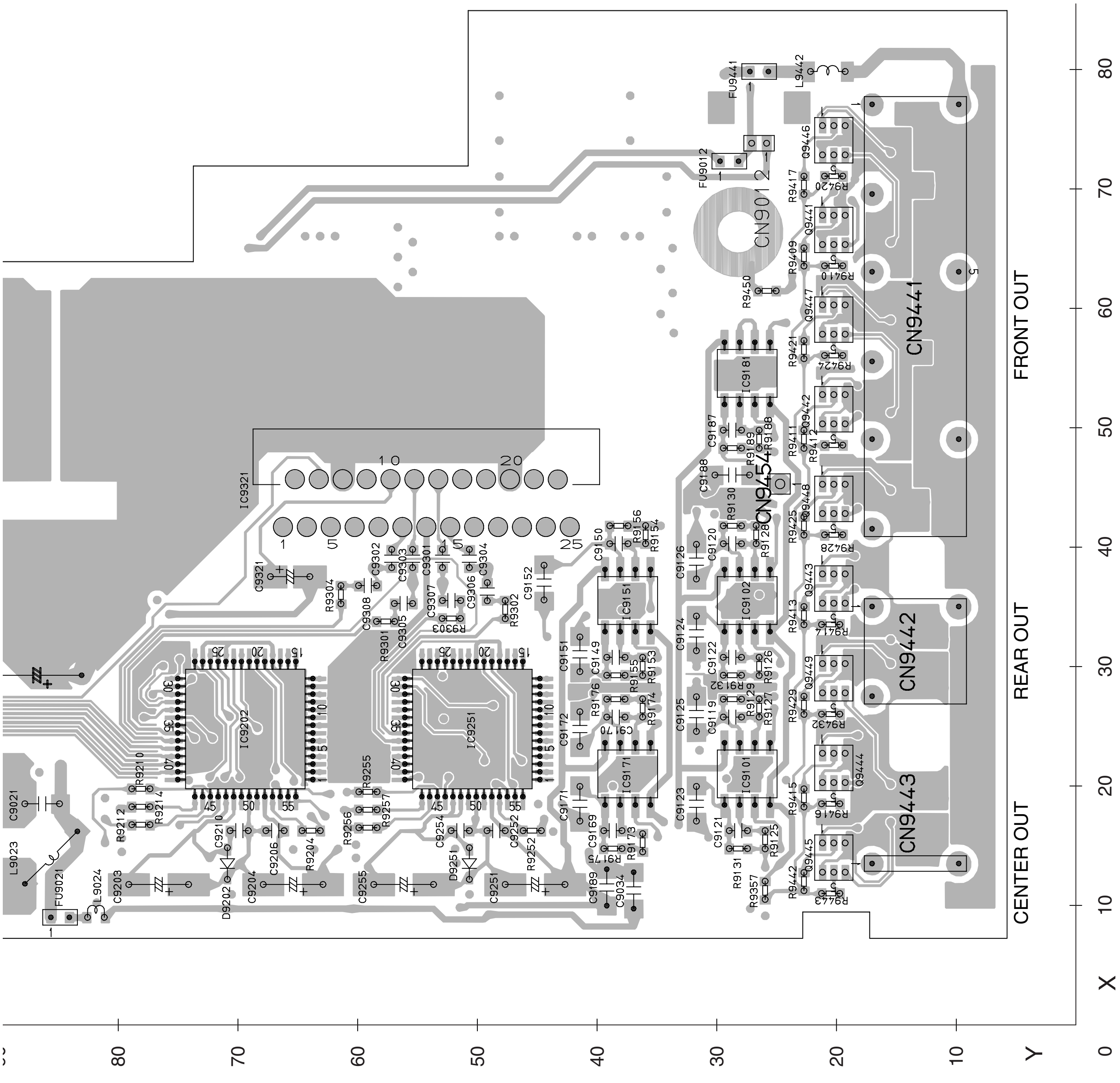
A

SIDE A

B

C

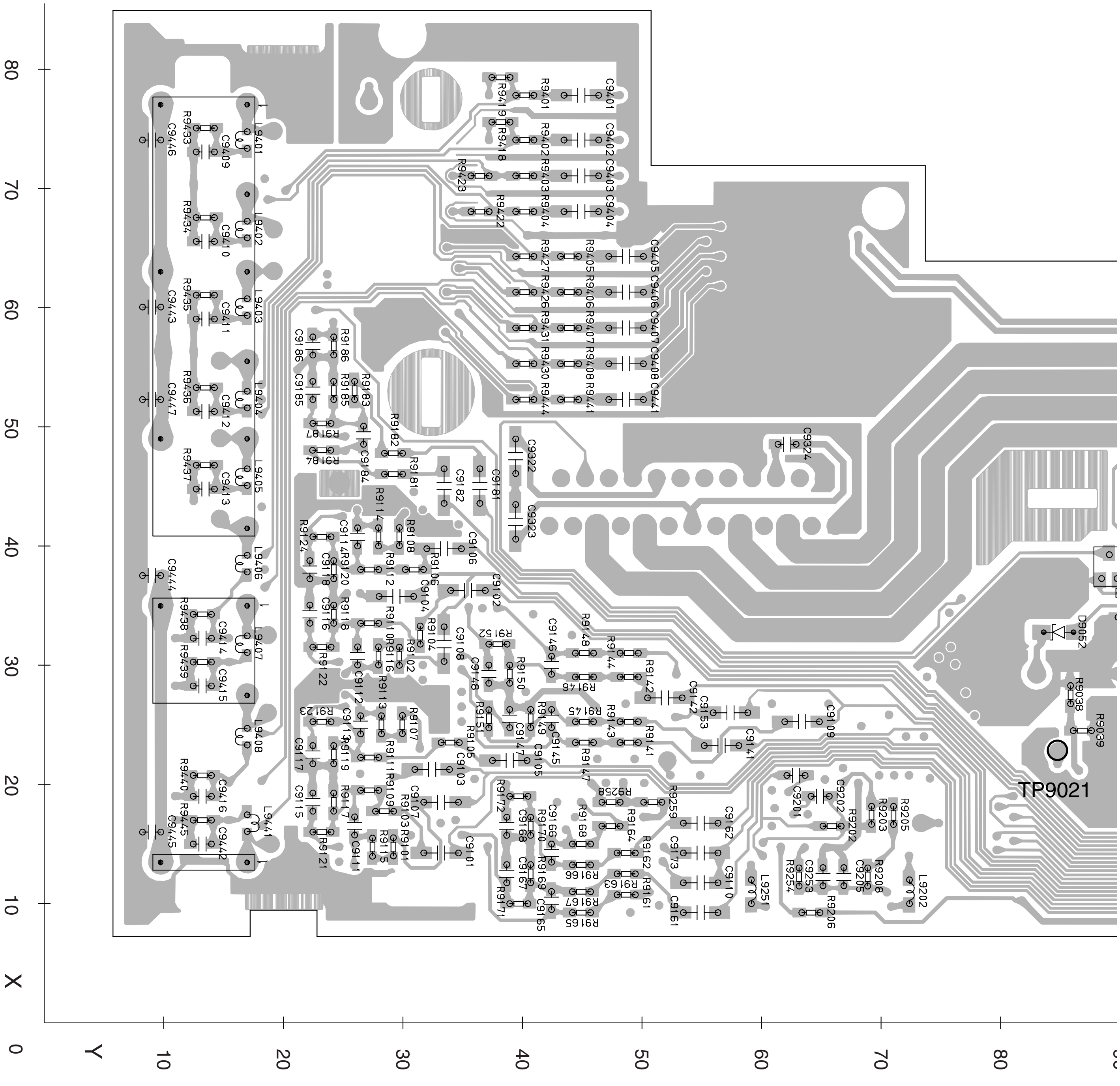
D


FRONT OUT
REAR OUT
CENTER OUT
CN9441
CN9442
CN9443
CN9454
CN9012
IC9321
IC9202
IC9251
IC9181
IC9151
IC9102
IC9171
IC9101
FU9441
FU9012
FU9021
L9442
L9023
L9024
D9202
D9251
Q9446
Q9441
Q9447
Q9442
Q9448
Q9443
Q9449
Q9444
Q9445
X
Y

E

F

L AMP UNIT


C9401
R9401
R9419
C9402
R9402
R9418
C9403
R9403
R9423
C9404
R9404
R9422
C9405
R9405
R9427
C9406
R9406
R9426
C9407
R9407
R9431
C9408
R9408
R9430
C9441
R9441
R9444
L9401
L9402
L9403
L9404
L9405
L9406
L9407
L9408
L9441
C9446
R9433
C9409
R9434
C9410
C9443
R9435
C9411
C9447
R9436
C9412
R9437
C9413
C9444
R9438
C9414
R9439
C9415
R9440
C9416
C9445
R9445
C9442
C9186
R9186
C9185
R9185
R9183
R9187
R9184
C9184
R9182
R9181
C9182
C9181
C9322
C9323
C9324
R9124
C9114
R9120
C9118
R9114
R9108
R9106
R9112
C9106
C9104
C9102
C9116
R9118
R9110
R9116
R9102
R9104
C9108
R9122
C9112
R9113
R9152
C9148
R9150
C9146
R9148
R9144
R9146
R9142
C9142
C9153
R9123
C9113
R9119
R9111
R9109
R9107
R9105
R9151
R9149
C9147
C9145
R9145
R9143
R9141
C9141
C9109
C9117
C9115
R9117
R9121
C9111
R9115
R9103
R9101
C9107
C9103
C9105
C9101
R9147
R9172
C9168
C9166
R9170
R9168
R9164
R9258
R9259
C9162
C9173
R9162
C9167
R9169
R9166
R9163
R9161
C9110
C9161
R9171
C9165
R9167
R9165
L9251
C9201
C9202
R9202
R9203
R9205
C9253
R9254
C9205
R9208
R9206
L9202
D9052
R9038
R9039
TP9021
X
Y
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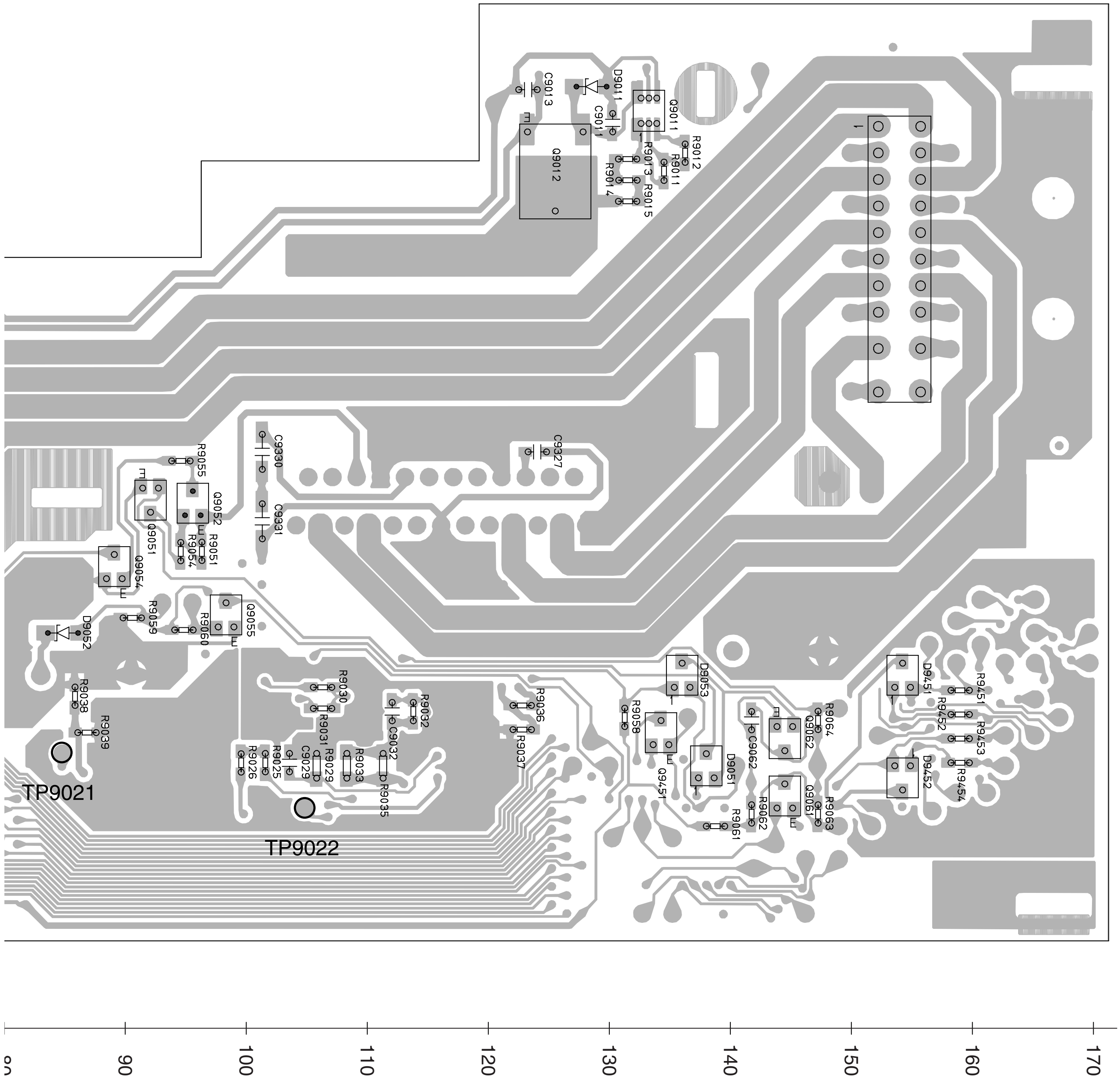
10
20
30
40
50
60
70
80

SIDE B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C9011
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R9012
R9011
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R9015
R9014
Q9012
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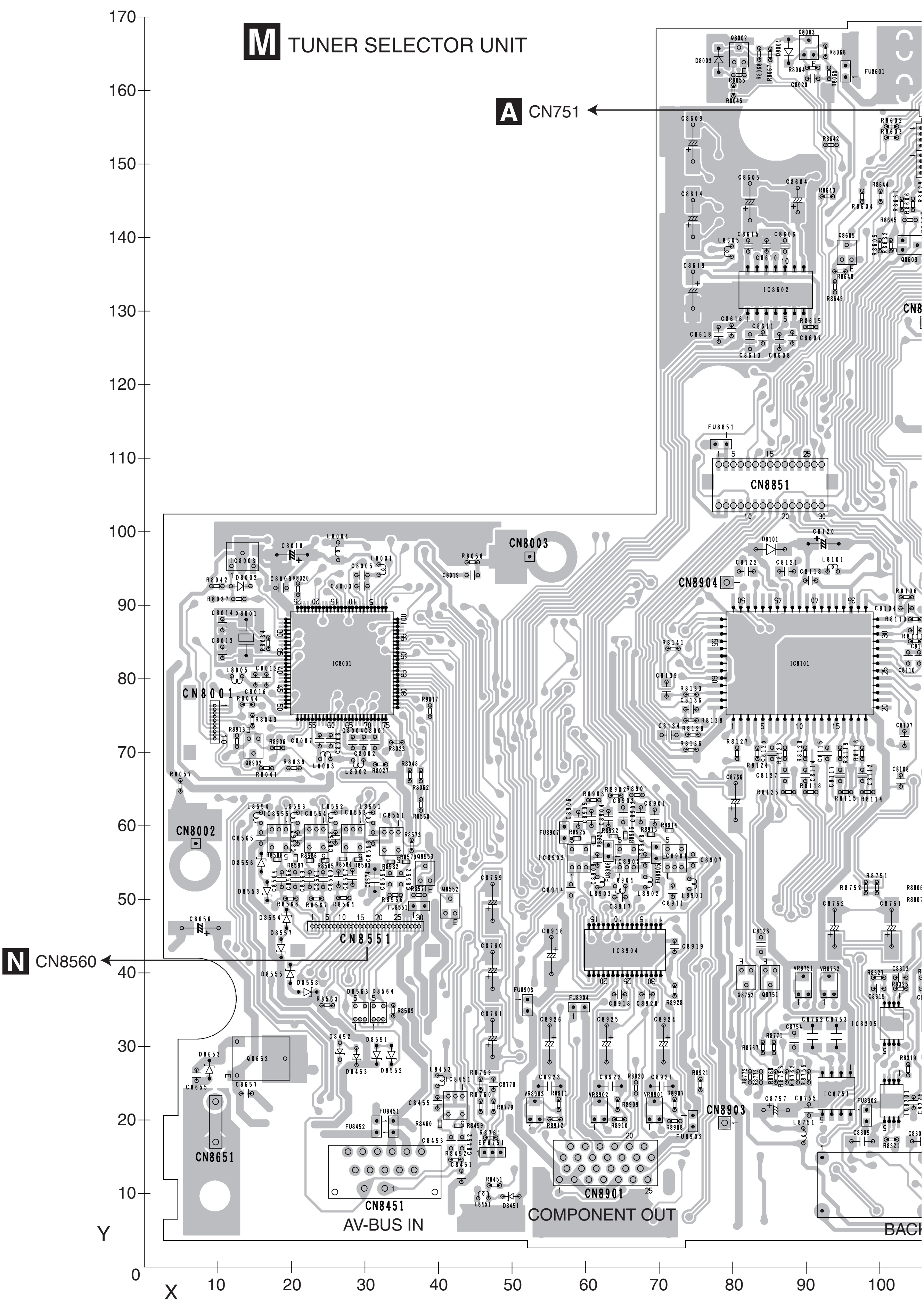
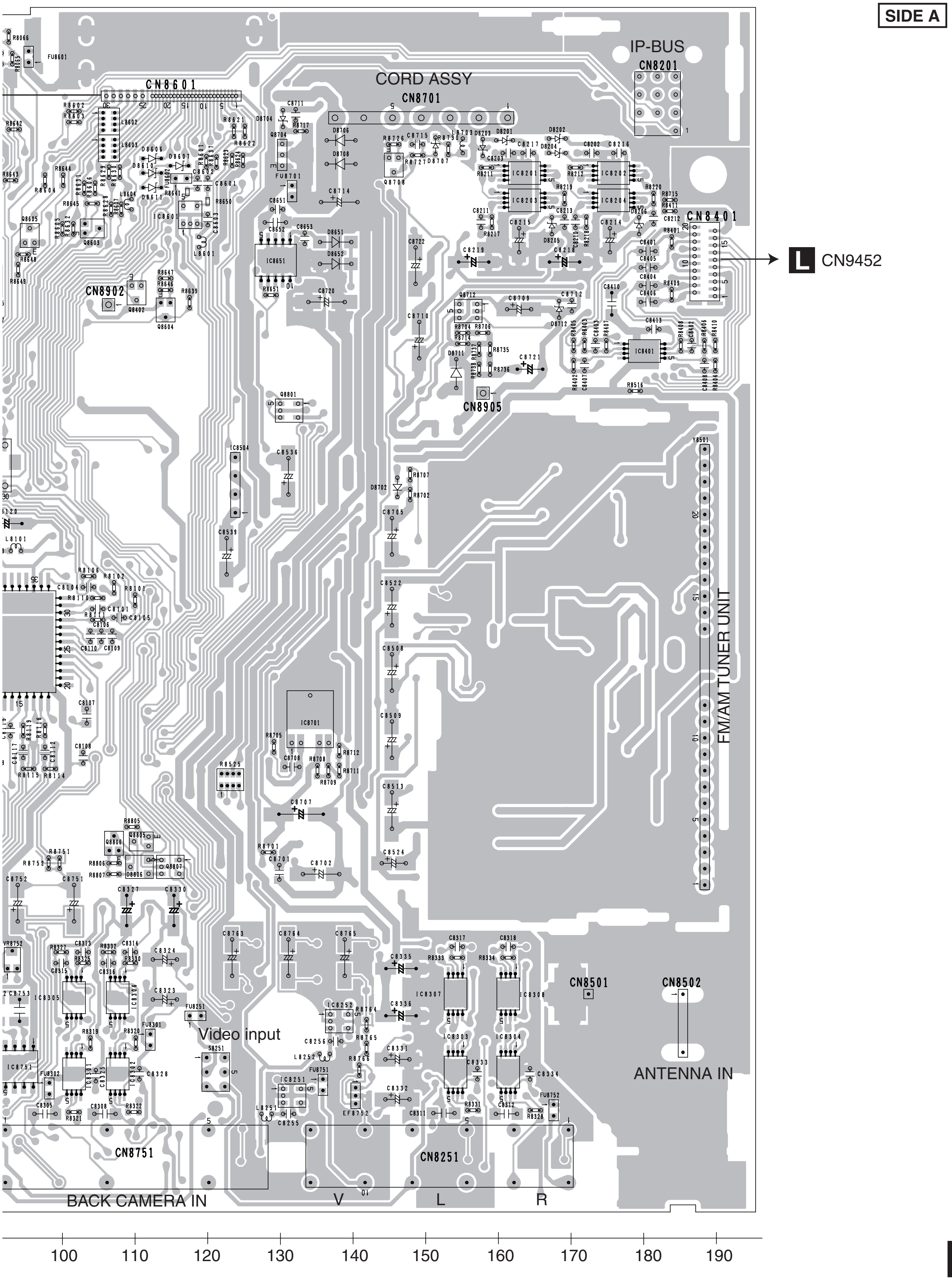
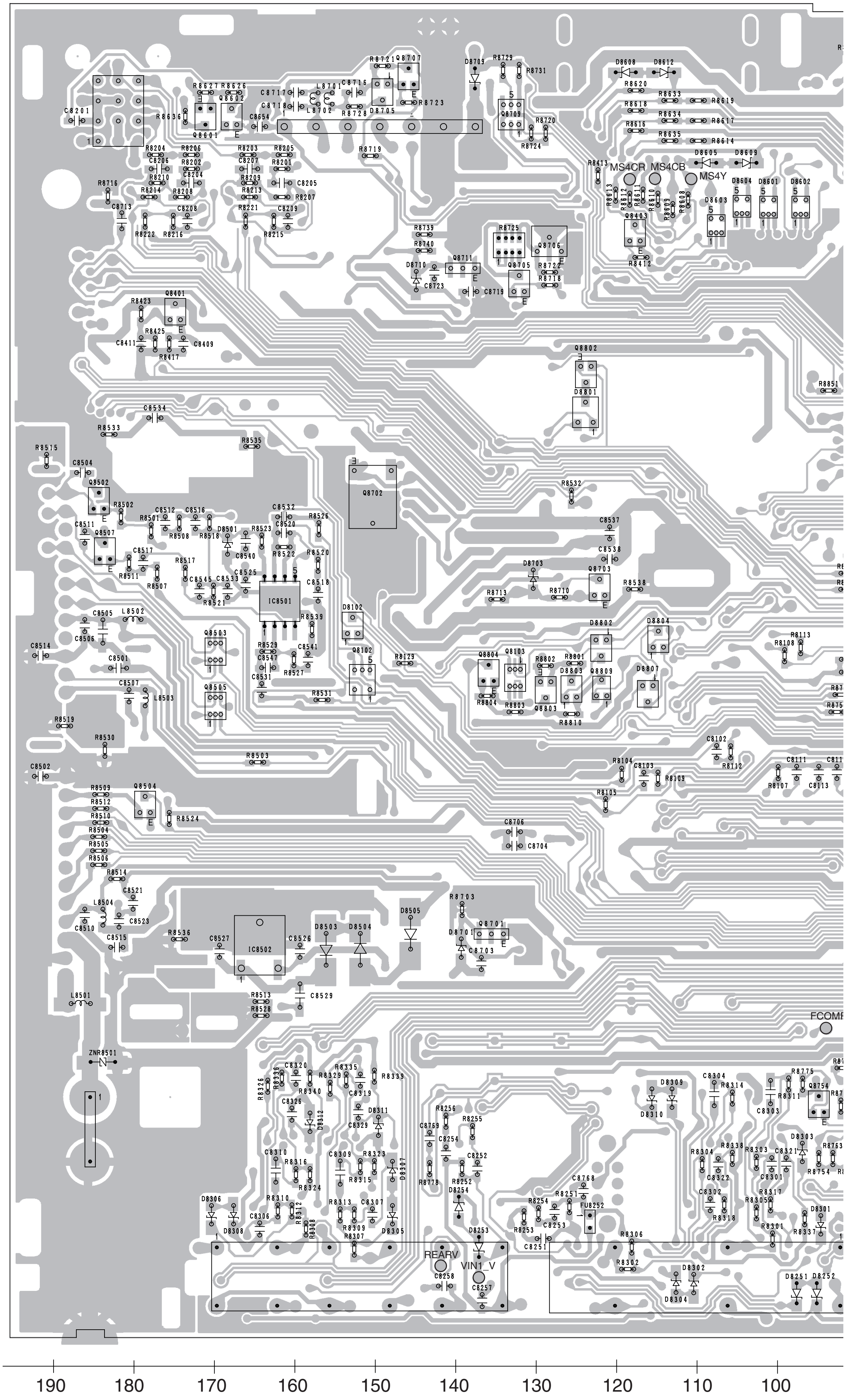
C9330
C9331
C9327
R9055
Q9052
Q9051
R9051
R9054
Q9054
R9059
R9060
Q9055
D9052
R9038
R9039
TP9021
TP9022
R9030
R9031
R9032
C9032
R9026
R9025
C9029
R9029
R9033
R9035
R9036
R9037
D9053
R9058
Q9451
D9051
C9062
R9064
Q9062
R9061
R9062
Q9061
R9063
D9451
R9451
R9452
R9453
D9452
R9454
90
100
110
120
130
140
150
160
170

11.10 TUNER SELECTOR UNIT


M TUNER SELECTOR UNIT
A CN751
N CN8560
CN8851
CN8003
CN8904
CN8001
CN8002
CN8551
CN8651
CN8451
AV-BUS IN
CN8901
COMPONENT OUT
CN8903
BACK
IC8001
IC8101
IC8602
IC8904
IC8751
IC8003
IC8903
IC8305
Q8002
Q8003
Q8605
Q8652
FU8851
FU8451
FU8452
Y
X
0
10
20
30
40
50
60
70
80
90
100
110
120
130
140
150
160
170


SIDE A
IP-BUS
CN8201
CORD ASSY
CN8701
CN8601
CN8401
L CN9452
CN8902
CN8905
IC8201
IC8202
IC8203
IC8204
IC8401
IC8601
IC8651
IC8504
IC8701
Y8501
FM/AM TUNER UNIT
CN8501
CN8502
ANTENNA IN
Video input
IC8252
IC8251
IC8305
IC8306
IC8301
IC8302
IC8303
IC8304
IC8307
IC8308
IC8751
CN8751
CN8251
BACK CAMERA IN
V
L
R
100
110
120
130
140
150
160
170
180
190

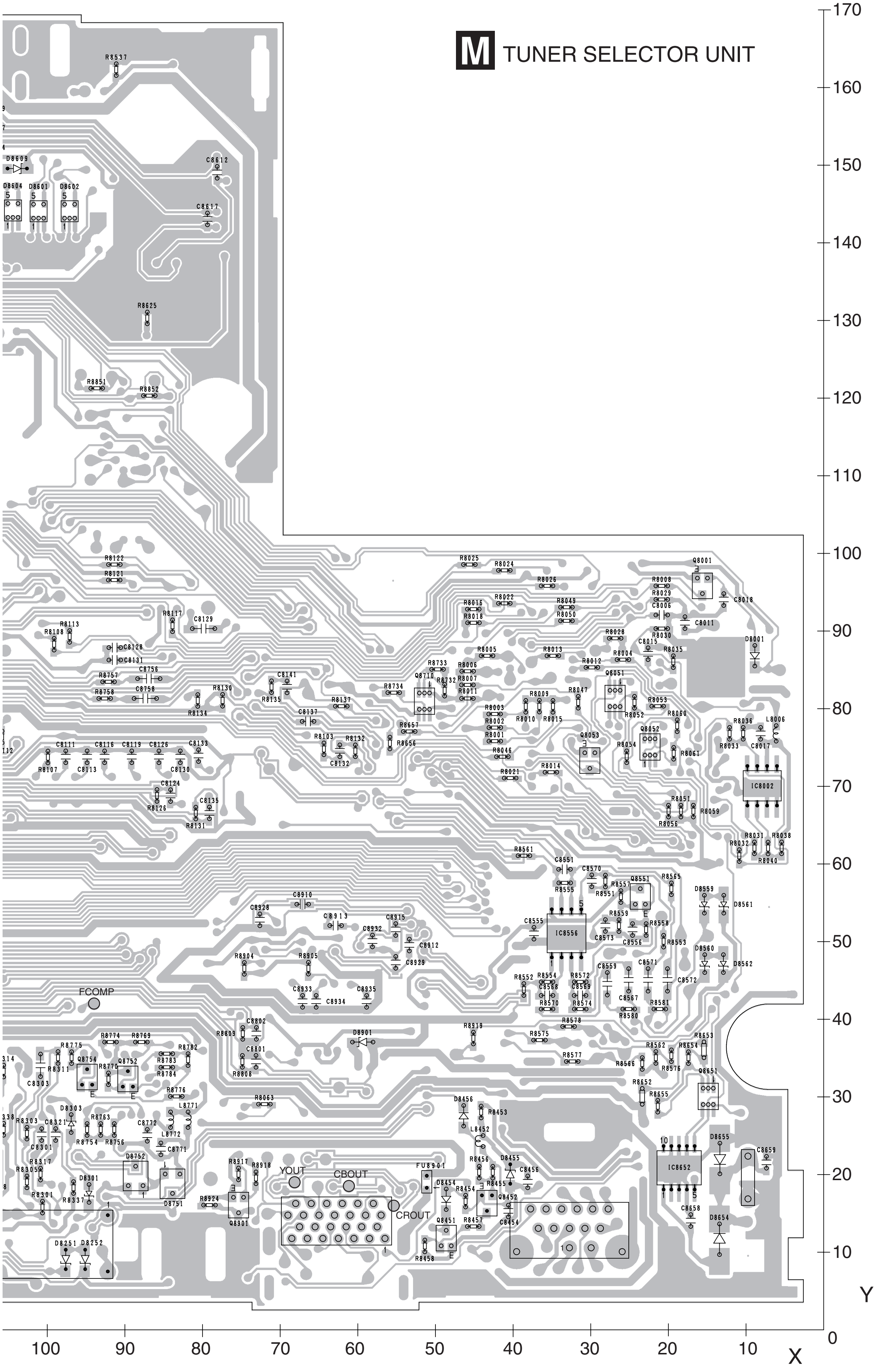
A
B
C
D
E
F



A
B
C
D
E
F
IC8501
IC8502
Q8702
MS4CR
MS4CB
MS4Y
FCOMP
REARV
VIN1_V
ZNR8501
L8501
L8502
L8503
L8504
FU8252
190
180
170
160
150
140
130
120
110
100

SIDE B

M TUNER SELECTOR UNIT


170
160
150
140
130
120
110
100
90
80
70
60
50
40
30
20
10
0
Y
X
100
90
80
70
60
50
40
30
20
10
R8537
D8609
C8612
D8604
D8601
D8602
C8617
R8625
R8851
R8852
R8122
R8121
R8113
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C8131
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C8116
C8119
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C8133
R8107
C8113
C8130
C8124
R8126
C8135
R8131
R8025
R8024
R8026
R8016
R8022
R8018
R8049
R8050
R8008
R8029
R8006
R8030
Q8001
C8018
C8011
R8028
C8015
R8035
D8001
R8005
R8013
R8012
R8004
R8733
R8006
R8007
R8011
R8732
Q8710
R8734
Q8051
R8053
R8052
R8060
R8003
R8002
R8001
R8009
R8010
R8015
R8047
R8657
R8656
R8046
R8014
R8021
Q8053
R8054
Q8052
R8061
R8036
L8006
R8033
C8017
IC8002
R8051
R8056
R8059
R8031
R8032
R8038
R8040
R8561
C8551
C8570
R8555
R8557
R8551
Q8551
R8565
D8559
D8561
C8555
IC8556
R8559
C8573
C8556
R8558
R8553
D8560
D8562
C8559
C8571
C8572
C8567
R8580
R8581
R8552
R8554
C8568
R8570
R8572
C8569
R8574
R8578
C8928
C8910
C8913
C8915
C8932
C8912
C8929
R8904
R8905
C8933
C8934
C8935
FCOMP
R8609
C8802
C8801
R8808
D8901
R8919
R8575
R8577
R8562
R8654
R8653
R8566
R8576
Q8651
R8652
R8655
R8774
R8769
R8775
R8782
R8783
R8784
Q8754
Q8752
R8770
R8311
C8303
R8776
L8771
R8063
D8303
R8303
C8321
R8763
C8772
L8772
C8771
R8754
R8756
C8301
R8317
R8305
D8752
D8301
R8301
R8337
D8751
R8917
R8918
YOUT
CBOUT
CROUT
Q8901
R8924
D8251
D8252
D8456
R8453
L8452
R8456
D8455
C8456
R8455
FU8901
D8454
R8454
Q8452
C8454
Q8451
R8457
R8458
IC8652
D8655
C8659
C8658
D8654
E
1
5
10

12. ELECTRICAL PARTS LIST

NOTE:

- *Parts whose parts numbers are omitted are subject to being not supplied.*
- *The part numbers shown below indicate chip components.*
  Chip Resistor
  RS1/○S○○○J,RS1/○○S○○○J
  Chip Capacitor (except for CQS.....)
  CKS....., CCS....., CSZS.....
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *Meaning of the figures and others in the parentheses in the parts list.*
  Example) IC 301 is on the point (face A, 91 of x-axis, and 111 of y-axis) of the corresponding PC board.
  IC 301 (A, 91, 111) IC NJM2068V

Circuit Symbol and No. **Part No.**

Unit Number : CWN2477(RC)
Unit Number : CWN2478(RD)
Unit Number : CWN2479(RI)
Unit Number : CWN2480(CN5)
Unit Name : DVD Mother Unit
Unit Number :
Unit Name : Keyboard Unit
Unit Number : CWN2486
Unit Name : Sub Keyboard Unit
Unit Number : CWN2483
Unit Name : Monitor Unit
Unit Number : CXX2316
Unit Name : Main PCB Unit(Service)
Unit Number : CZW5029
Unit Name : Switch PCB Unit
Unit Number : CZW5028
Unit Name : Volume PCB Unit
Unit Number : CWN2489
Unit Name : Power Supply Unit
Unit Number : CWN2493
Unit Name : Amp Unit
Unit Number : CWN2491
Unit Name : Tuner Selector Unit

Circuit Symbol and No. **Part No.**

Unit Number : YWX5004
Unit Name : DVD Core Unit
Unit Number : CWX3154
Unit Name : Compound Unit(A)
Unit Number : CWX3394
Unit Name : Compound Unit(B)

A

Unit Number : CWN2477(RC)
Unit Number : CWN2478(RD)
Unit Number : CWN2479(RI)
Unit Number : CWN2480(CN5)
Unit Name : DVD Mother Unit

MISCELLANEOUS

IC 101	(B,96,66)	IC	S-80827CNNB-B8M
IC 102	(A,135,69)	IC	PE5604A
IC 232	(B,95,99)	IC	BA00BC0WFP
IC 234	(A,101,70)	IC	S-814A33AMC-BCX
IC 281	(A,57,68)	IC	CXA2089Q
IC 391	(A,26,65)	IC	NJM4558V
IC 421	(A,81,107)	IC	NJM2505AF
IC 451	(A,60,112)	IC	NJM2589V
IC 511	(A,73,82)	IC	NJM2515V
IC 551	(A,107,62)	IC	HA12241FP
IC 631	(B,109,69)	IC	TC74VHCT08AFTS1
IC 632	(B,100,73)	IC	TC7SH08FUS1
IC 851	(B,51,73)	IC	NJM4558V
IC 854	(B,46,63)	IC	NJM4558V
IC 871	(B,105,118)	IC	BA6288FS
IC 3001	(A,137,35)	IC	PEG361A
IC 3002	(B,134,33)	IC	S-80827CNNB-B8M
IC 3101	(A,74,48)	IC	AK5381VT
IC 3151	(A,64,16)	IC	TC74VHC08FTS1
IC 3152	(A,71,33)	IC	AK4113VF

Circuit Symbol and No.			Part No.
IC 3201	(B,26,131)	IC	TC7SH08FUS1
IC 3251	(A,82,31)	IC	XC25BS5134MR
IC 3252	(A,81,39)	IC	XC25BS5136MR
IC 3253	(A,87,30)	IC	TC7WB383FK
IC 3254	(A,86,37)	IC	TC7MB3257FK
IC 3255	(A,92,33)	IC	TC7WB383FK
IC 3301	(B,89,24)	IC	D610A003BPYPA225
IC 3302	(B,112,13)	Logic IC	TC7SHU04FUS1
IC 3401	(A,110,23)	IC	HY57V161610ETP-7I
IC 3451	(A,86,17)	IC	PEH047A
IC 3501	(A,105,43)	IC	DSD1608PAH
IC 3551	(A,88,45)	D/A Converter	PCM1753DBQ
IC 3651	(A,63,46)	IC	S-818A50AUC-BHE
IC 3661	(A,147,8)	Regulator IC	PQ1M335M2SPQ
IC 3671	(B,134,11)	Regulator IC	PQ035ZN01ZPH
IC 3681	(A,59,38)	IC	PQ1X331M2ZP
IC 3691	(A,54,42)	IC	S-812C33AMC-C2N
Q 101	(B,91,67)	Transistor	2SC4081
Q 102	(B,112,79)	Chip Transistor	DTA144EUA
Q 103	(B,112,77)	Transistor	2SC4081
Q 104	(B,104,63)	Transistor	2SC4081
Q 106	(A,119,56)	Transistor	2SA1576A
Q 107	(B,111,85)	Transistor	2SC4081
Q 231	(A,128,9)	Transistor	UMF23N
Q 233	(A,90,73)	Transistor	UMF23N
Q 234	(A,92,71)	Chip Transistor	2SA1576A
Q 235	(B,107,76)	Transistor	IMX1
Q 236	(A,6,110)	Transistor	2SD1664
Q 237	(B,26,15)	Transistor	2SD1664
Q 238	(B,11,152)	Chip Transistor	DTC114EUA
Q 239	(B,18,148)	Transistor	2SC4081
Q 240	(B,100,69)	Transistor	UMF23N
Q 241	(B,26,109)	Transistor	2SD1664
Q 242	(A,5,118)	Transistor	IMD3A
Q 243	(A,22,20)	Transistor	IMD3A
Q 244	(B,38,127)	Transistor	2SC4081
Q 245	(B,10,132)	Transistor	2SC4081
Q 246	(B,117,87)	Transistor	UMF23N
Q 247	(B,30,110)	Transistor	UMF23N
Q 391	(A,32,57)	Transistor	2SC4081
Q 491	(A,39,60)	Chip Transistor	2SA1576A
Q 492	(A,41,68)	Transistor	2SC4081
Q 561	(A,97,64)	Transistor	2SC4081
Q 562	(A,90,63)	Transistor	2SA1576A
Q 571	(B,109,105)	Transistor	2SB1132
Q 572	(B,112,102)	Chip Transistor	DTC114EUA
Q 573	(B,97,110)	Transistor	2SA1615-ZS1
Q 574	(B,110,109)	Chip Transistor	DTC114EUA
Q 575	(A,105,74)	Transistor	UMF23N
Q 631	(A,102,80)	Transistor	IMD3A
Q 632	(A,106,80)	Transistor	UMF23N
Q 633	(A,99,80)	Transistor	IMD3A
Q 634	(A,95,80)	Transistor	IMD3A
Q 651	(B,16,18)	Transistor	2SD1664
Q 652	(B,17,9)	Transistor	IMD2A
Q 653	(A,27,8)	Transistor	2SA1577
Q 654	(A,34,8)	Chip Transistor	DTC114EUA
Q 656	(A,32,32)	Chip Transistor	DTA114EUA
Q 657	(A,25,36)	Transistor	2SC4081
Q 658	(A,25,39)	Transistor	2SC4081

Circuit Symbol and No.			Part No.
Q 659	(A,49,30)	Transistor	UMF23N
Q 660	(A,115,6)	Chip Transistor	DTC114EUA
Q 661	(A,54,33)	Transistor	2SA1577
Q 662	(A,54,29)	Chip Transistor	DTC114EUA
Q 663	(A,120,6)	Chip Transistor	DTC114EUA
Q 751	(B,4,122)	Transistor	2SC4081
Q 851	(A,50,137)	Transistor	2SD2114K
Q 852	(A,49,140)	Chip Transistor	DTA114EUA
Q 853	(B,68,127)	Transistor	2SA1576A
Q 854	(B,62,137)	Transistor	UMF23N
Q 855	(B,52,138)	Transistor	UMF23N
Q 856	(B,48,144)	Transistor	UMF23N
Q 857	(B,48,138)	Transistor	UMF23N
Q 858	(B,68,122)	Transistor	2SA1576A
Q 871	(B,71,147)	Transistor	2SD1760F5
Q 872	(B,84,152)	Transistor	IMD3A
Q 3001	(B,139,34)	Chip Transistor	DTC114EUA
Q 3002	(B,134,46)	Transistor	IMD2A
Q 3201	(B,29,135)	Transistor	2SC2412K
Q 3656	(A,59,44)	Transistor	UMF23N
D 101	(B,95,72)	Diode	1SS355
D 102	(B,89,73)	Diode	1SS355
D 103	(A,138,84)	Diode	RB160M-30
D 104	(B,92,70)	Diode	1SS355
D 233	(B,21,149)	Diode	1SS355
D 234	(A,123,5)	LED	CL-270HR
D 236	(A,25,131)	Diode	DAN202U
D 237	(A,5,114)	Diode	UDZS9R1(B)
D 238	(A,26,19)	Diode	UDZS5R6(B)
D 239	(B,14,124)	Diode	HZU7L(A1)
D 240	(B,31,107)	Diode	HZU6R2(B1)
D 241	(A,14,137)	Diode	HZU7L(C3)
D 242	(B,18,145)	Diode	HZU7L(C3)
D 243	(B,24,123)	Diode	RSX201L-30
D 244	(B,11,148)	Diode	S1G-6904G2P
D 245	(A,30,133)	Diode	UMZ6R8EN
D 246	(A,23,126)	Diode	UDZS6R8(B)
D 247	(B,38,124)	Diode	UDZS4R7(B)
D 248	(B,9,121)	Diode	DAN202U
D 249	(A,8,136)	Diode	1SR154-400
D 250	(B,10,144)	Diode	1SR154-400
D 251	(A,46,134)	Diode	DAN202U
D 281	(A,55,83)	Diode	1SR154-400
D 551	(A,102,64)	Diode	DAN202U
D 561	(A,94,63)	Diode	RB160M-40
D 562	(A,91,60)	Diode	RB160M-40
D 571	(B,114,94)	Diode	RB160M-30
D 651	(B,17,13)	Diode	HZU8R2(B1)
D 652	(B,51,36)	Diode	UMZ6R8EN
D 653	(B,36,31)	Diode	UMZ6R8EN
D 654	(A,29,37)	Diode	1SS355
D 655	(A,29,39)	Diode	1SS355
D 656	(A,81,7)	White LED	NESW505C-5273
D 657	(A,81,5)	LED	CL-270HR
D 754	(A,76,117)	Diode	HZU2R7(B1)
D 758	(A,78,117)	Diode	HZU2R7(B1)
D 759	(B,45,135)	Diode	UDZS5R6(B)
D 760	(B,49,135)	Diode	UDZS5R6(B)
D 761	(B,45,133)	Diode	UDZS5R6(B)
D 762	(B,49,133)	Diode	UDZS5R6(B)

Circuit Symbol and No.			Part No.
D 851	(B,75,113)	Diode	UDZS3R9(B)
D 854	(B,53,142)	Diode	1SS355
D 855	(B,53,145)	Diode	1SS355
D 856	(B,53,144)	Diode	1SS355
D 871	(B,104,125)	Diode	1SR154-400
D 872	(B,104,129)	Diode	1SR154-400
D 873	(B,79,153)	Diode	UDZS5R6(B)
D 3001	(A,149,47)	Diode	RB160M-30
D 3002	(B,129,33)	Diode	1SS355
D 3201	(B,33,137)	Diode	1SS355
D 3691	(B,26,117)	Diode	1SR154-400
L 101	(A,112,79)	Inductor	LCTAW2R2J2520
L 102	(A,120,82)	Inductor	CTF1473
L 103	(A,149,81)	Inductor	CTF1306
L 231	(A,25,128)	Inductor	LCTC2R2K1608
L 232	(A,97,70)	Inductor	CTF1473
L 233	(A,26,135)	Inductor	CTF1379
L 234	(B,30,126)	Inductor	CTF1487
L 235	(A,31,116)	Inductor	CTF1487
L 236	(B,29,117)	Inductor	CTF1487
L 237	(B,34,126)	Inductor	CTF1487
L 238	(B,38,131)	Inductor	CTF1487
L 239	(A,36,118)	Inductor	CTF1487
L 240	(A,36,131)	Inductor	CTF1379
L 241	(A,38,131)	Inductor	CTF1379
L 242	(A,39,131)	Inductor	CTF1379
L 243	(B,31,117)	Inductor	CTF1487
L 244	(A,43,131)	Inductor	CTF1379
L 245	(B,42,118)	Inductor	CTF1487
L 246	(A,45,131)	Inductor	CTF1379
L 281	(A,53,79)	Inductor	CTF1473
L 421	(A,84,102)	Inductor	CTF1473
L 451	(A,64,118)	Inductor	CTF1473
L 491	(A,37,68)	Inductor	CTF1473
L 551	(A,100,64)	Inductor	CTF1473
L 571	(B,100,87)	Coil	CTH1267
L 572	(A,59,136)	Inductor	CTH1262
L 631	(B,107,72)	Inductor	CTF1473
L 632	(B,100,77)	Inductor	CTF1473
L 751	(A,86,117)	Inductor	CTF1379
L 753	(A,88,114)	Inductor	CTF1379
L 754	(A,89,117)	Inductor	CTF1379
L 755	(A,89,114)	Inductor	CTF1379
L 756	(A,91,117)	Inductor	CTF1379
L 757	(A,91,114)	Inductor	CTF1379
L 760	(A,95,117)	Inductor	CTF1379
L 761	(A,69,119)	Inductor	CTF1379
L 851	(A,71,122)	Inductor	CTF1379
L 852	(A,69,126)	Inductor	CTF1379
L 853	(A,69,128)	Inductor	CTF1379
L 3001	(A,149,39)	Inductor	CTF1473
L 3002	(A,124,35)	Inductor	CTF1473
L 3003	(A,131,16)	Inductor	CTF1306
L 3101	(A,68,50)	Inductor	CTF1473
L 3151	(A,67,9)	Inductor	CTF1473
L 3152	(A,71,19)	Inductor	CTF1473
L 3153	(A,62,27)	Inductor	CTF1473
L 3201	(B,26,135)	Inductor	CTF1473
L 3251	(A,78,33)	Inductor	CTF1473
L 3252	(A,78,39)	Inductor	CTF1473

Circuit Symbol and No.			Part No.
L 3253	(A,85,33)	Inductor	CTF1473
L 3254	(A,90,35)	Inductor	CTF1473
L 3255	(A,92,36)	Inductor	CTF1473
L 3301	(B,104,7)	Inductor	CTF1473
L 3302	(B,101,5)	Inductor	CTF1473
L 3303	(B,96,5)	Inductor	CTF1473
L 3304	(B,91,5)	Inductor	CTF1473
L 3305	(B,88,5)	Inductor	CTF1473
L 3306	(B,83,5)	Inductor	CTF1473
L 3307	(B,76,5)	Inductor	CTF1473
L 3308	(B,74,7)	Inductor	CTF1473
L 3309	(B,69,12)	Inductor	CTF1473
L 3310	(B,70,9)	Inductor	CTF1473
L 3311	(B,69,15)	Inductor	CTF1473
L 3312	(B,68,25)	Inductor	CTF1473
L 3313	(B,69,34)	Inductor	CTF1473
L 3314	(B,69,36)	Inductor	CTF1473
L 3315	(B,75,43)	Inductor	CTF1473
L 3316	(B,79,43)	Inductor	CTF1473
L 3317	(B,84,43)	Inductor	CTF1473
L 3318	(B,87,43)	Inductor	CTF1473
L 3319	(B,92,45)	Inductor	CTF1473
L 3320	(B,108,39)	Inductor	CTF1473
L 3321	(B,108,36)	Inductor	CTF1473
L 3322	(B,108,30)	Inductor	CTF1473
L 3323	(B,108,24)	Inductor	CTF1473
L 3324	(B,108,23)	Inductor	CTF1473
L 3325	(B,112,17)	Inductor	CTF1379
L 3326	(B,108,9)	Inductor	CTF1473
L 3327	(B,108,7)	Inductor	CTF1473
L 3328	(B,72,22)	Chip Beads	VTL1127
L 3451	(A,100,11)	Inductor	CTF1473
L 3501	(A,112,34)	Inductor	CTF1473
L 3502	(A,95,37)	Inductor	CTF1473
L 3503	(A,97,39)	Inductor	CTF1306
L 3504	(A,97,36)	Inductor	LCTAW220J2016
L 3551	(A,88,53)	Inductor	CTF1379
X 101	(A,114,71)	Oscillator 4.718 592 MHz	CSS1703
X 3001	(A,149,35)	Radiator 10.0 MHz	CSS1577
X 3151	(A,67,26)	Oscillator 12.288 MHz	CSS1704
X 3301	(B,117,13)	Oscillator 24.576 MHz	CSS1699
S 871	(B,34,70)	Spring Switch(NSCLS)	CSN1073
S 872	(B,34,51)	Spring Switch(NSOPEN)	CSN1073
VR281	(A,56,101)	Semi-fixed 2.2 kΩ(OB)	CCP1485
VR451	(A,72,108)	Semi-fixed 100 kΩ(OB)	CCP1477
VR452	(A,70,105)	Semi-fixed 100 kΩ(OB)	CCP1477
VR453	(A,73,119)	Semi-fixed 100 kΩ(OB)	CCP1477
VR491	(A,41,64)	Semi-fixed 1 kΩ(OB)	CCP1483
VR511	(A,79,72)	Semi-fixed 100 kΩ(OB)	CCP1477
VR512	(A,79,66)	Semi-fixed 100 kΩ(OB)	CCP1477
VR513	(A,79,61)	Semi-fixed 100 kΩ(OB)	CCP1477
⚠FU232	(A,34,117)	Fuse 3 A	CEK1286
⚠FU233	(A,38,118)	Fuse 3 A	CEK1286
⚠FU571	(A,117,87)	Fuse 1.25 A	CEK1281
⚠FU572	(B,105,109)	Fuse 1.75 A	CEK1283
⚠FU573	(A,104,88)	Fuse 2 A	CEK1284
⚠FU651	(B,26,20)	Fuse 250 mA	CEK1276
⚠FU652	(A,22,7)	Fuse 400 mA	CEK1250
⚠FU751	(A,50,133)	Fuse 3 A	CEK1286

Circuit Symbol and No.			Part No.
⚠FU752	(A,102,130)	Fuse 3 A	CEK1286
FB3407	(A,111,31)	Inductor	CTF1639
FB3401	(A,100,13)	Inductor	CTF1639
FB3403	(A,105,13)	Inductor	CTF1639
FB3404	(A,110,13)	Inductor	CTF1639
FB3405	(A,121,13)	Inductor	CTF1639
FB3406	(A,106,32)	Inductor	CTF1639
EF3301	(B,114,20)	EMI Filter	RTF1183
EF3401	(A,124,12)	Chip EMI Filter	DTL1106
BZ101	(B,147,11)	Buzzer	CPV1063

RESISTORS

Circuit Symbol and No.			Part No.
R 101	(B,123,73)		RS1/16S102J
R 102	(B,123,71)		RS1/16S221J
R 103	(B,123,70)		RS1/16S221J
R 104	(B,123,68)		RS1/16S102J
R 105	(B,123,67)		RS1/16S182J
R 106	(B,123,65)		RS1/16S182J
R 107	(A,115,63)		RS1/16S471J
R 108	(A,112,63)		RS1/16S471J
R 109	(B,88,65)		RS1/16S102J
R 110	(B,95,70)		RS1/16S104J
R 111	(B,86,67)		RS1/16S104J
R 112	(B,90,71)		RS1/16S473J
R 113	(B,93,74)		RS1/16S0R0J
R 114	(B,126,76)		RS1/16S473J
R 115	(B,123,77)		RS1/16S471J
R 116	(B,123,76)		RS1/16S102J
R 117	(B,123,74)		RS1/16S0R0J
R 118	(B,126,73)		RS1/16S473J
R 119	(B,126,72)		RS1/16S473J
R 120	(B,126,70)		RS1/16S473J
R 121	(B,126,68)		RS1/16S473J
R 122	(B,123,64)		RS1/16S473J
R 123	(B,126,64)		RS1/16S473J
R 124	(A,115,62)		RS1/16S223J
R 125	(A,119,60)		RS1/16S221J
R 126	(A,119,59)		RS1/16S221J
R 127	(B,128,58)		RS1/16S102J
R 128	(B,96,74)		RS1/16S102J
R 129	(A,120,70)		RS1/16S0R0J
R 130	(B,90,75)		RS1/16S0R0J
R 131	(B,127,58)		RS1/16S102J
R 132	(B,128,77)		RS1/16S473J
R 133	(B,124,80)		RS1/16S102J
R 134	(B,43,52)		RS1/16S473J
R 135	(A,124,54)		RS1/16S0R0J
R 136	(B,127,61)		RS1/16S473J
R 137	(A,126,54)		RS1/16S0R0J
R 138	(B,125,80)		RS1/16S102J
R 139	(A,127,54)		RS1/16S0R0J
R 140	(B,128,61)		RS1/16S473J
R 141	(B,126,77)		RS1/16S105J
R 142	(A,129,54)		RS1/16S0R0J
R 143	(B,130,61)		RS1/16S473J
R 144	(A,130,53)		RS1/16S471J
R 145	(B,127,80)		RS1/16S471J
R 146	(A,132,53)		RS1/16S471J
R 147	(B,131,64)		RS1/16S473J
R 148	(B,127,83)		RS1/16S471J

Circuit Symbol and No.			Part No.
R 149	(A,134,53)		RS1/16S471J
R 150	(B,133,64)		RS1/16S473J
R 151	(B,128,83)		RS1/16S102J
R 152	(A,135,53)		RS1/16S471J
R 153	(B,117,81)		RS1/16S103J
R 155	(B,113,74)		RS1/16S473J
R 156	(B,110,77)		RS1/16S104J
R 157	(B,128,80)		RS1/16S473J
R 158	(B,134,64)		RS1/16S473J
R 159	(A,137,53)		RS1/16S471J
R 160	(B,131,61)		RS1/16S473J
R 161	(B,130,83)		RS1/16S102J
R 162	(A,138,53)		RS1/16S471J
R 163	(B,130,80)		RS1/16S473J
R 164	(B,136,64)		RS1/16S473J
R 165	(A,140,53)		RS1/16S471J
R 166	(B,133,61)		RS1/16S473J
R 167	(B,131,83)		RS1/16S102J
R 168	(B,125,83)		RS1/16S102J
R 169	(A,154,55)		RS1/16S0R0J
R 170	(B,133,80)		RS1/16S102J
R 171	(A,141,53)		RS1/16S102J
R 172	(B,133,77)		RS1/16S104J
R 173	(B,133,83)		RS1/16S102J
R 174	(B,131,58)		RS1/16S102J
R 175	(B,134,80)		RS1/16S102J
R 176	(A,116,56)		RS1/16S682J
R 178	(B,134,83)		RS1/16S102J
R 180	(B,136,80)		RS1/16S102J
R 181	(A,143,53)		RS1/16S102J
R 182	(B,136,83)		RS1/16S102J
R 184	(B,137,80)		RS1/16S102J
R 186	(B,137,58)		RS1/16S221J
R 187	(B,137,64)		RS1/16S104J
R 188	(B,139,58)		RS1/16S221J
R 189	(B,137,61)		RS1/16S473J
R 190	(B,139,64)		RS1/16S473J
R 191	(B,137,83)		RS1/16S102J
R 192	(A,130,8)		RS1/16S820J
R 193	(B,139,80)		RS1/16S102J
R 194	(B,139,83)		RS1/16S102J
R 195	(A,152,89)		RS1/16S473J
R 196	(B,139,61)		RS1/16S473J
R 197	(A,152,88)		RS1/16S473J
R 198	(A,152,86)		RS1/16S473J
R 200	(A,152,85)		RS1/16S473J
R 201	(A,152,75)		RS1/16S103J
R 202	(A,155,78)		RS1/16S474J
R 203	(A,150,78)		RS1/16S104J
R 204	(A,151,73)	(CN5)	RS1/16S473J
R 205	(A,151,72)	(RD,RI)	RS1/16S473J
R 206	(A,151,70)	(RC,RI)	RS1/16S473J
R 207	(A,154,73)	(RC,RD,RI)	RS1/16S473J
R 208	(A,154,72)	(RC,CN5)	RS1/16S473J
R 209	(A,154,70)	(RD,CN5)	RS1/16S473J
R 210	(A,151,68)		RS1/16S102J
R 212	(A,151,67)		RS1/16S473J
R 213	(A,154,66)		RS1/16S473J
R 214	(A,151,65)		RS1/16S473J
R 215	(A,154,64)		RS1/16S102J

Circuit Symbol and No.		Part No.
R 216	(A,151,64)	RS1/16S102J
R 217	(A,154,63)	RS1/16S102J
R 219	(A,147,54)	RS1/16S102J
R 220	(A,151,61)	RS1/16S102J
R 221	(A,154,60)	RS1/16S102J
R 222	(A,151,59)	RS1/16S102J
R 223	(A,151,56)	RS1/16S473J
R 224	(A,154,57)	RS1/16S102J
R 225	(B,107,63)	RS1/16S223J
R 226	(A,151,55)	RS1/16S473J
R 227	(A,154,58)	RS1/16S104J
R 228	(A,119,62)	RS1/16S102J
R 230	(A,155,88)	RS1/16S474J
R 232	(A,129,12)	RS1/16S103J
R 233	(A,126,10)	RS1/16S332J
R 234	(A,155,86)	RS1/16S474J
R 235	(B,114,85)	RS1/16S223J
R 236	(B,110,98)	RS1/16S102J
R 237	(A,130,6)	RS1/16S820J
R 239	(B,103,98)	RS1/16S1503D
R 240	(B,103,97)	RS1/16S2002D
R 241	(A,87,71)	RS1/16S473J
R 242	(A,95,71)	RS1/16S472J
R 243	(A,93,73)	RS1/16S472J
R 244	(A,89,71)	RS1/16S223J
R 245	(B,103,95)	RS1/16S1003D
R 246	(B,99,95)	RS1/16S0R0J
R 247	(B,20,152)	RS1/16S103J
R 248	(A,10,133)	RS1/16S104J
R 249	(B,10,123)	RS1/16S103J
R 250	(B,18,150)	RS1/16S103J
R 251	(B,10,124)	RS1/16S473J
R 252	(B,18,146)	RS1/16S104J
R 254	(A,101,67)	RS1/16S102J
R 255	(A,3,135)	RS1/16S473J
R 256	(A,27,135)	RS1/16S153J
R 257	(B,9,150)	RS1/16S103J
R 258	(B,18,143)	RS1/16S473J
R 259	(A,5,121)	RS1/16S271J
R 260	(B,100,65)	RS1/16S472J
R 261	(B,100,67)	RS1/16S472J
R 262	(B,10,126)	RS1/16S472J
R 263	(B,30,112)	RS1/16S820J
R 264	(B,34,110)	RS1/16S472J
R 265	(A,5,123)	RS1/16S271J
R 266	(B,6,135)	RS1/16S104J
R 267	(A,26,23)	RS1/16S101J
R 268	(A,28,128)	RS1/16S102J
R 269	(A,29,135)	RS1/16S102J
R 270	(A,31,135)	RS1/16S102J
R 271	(A,42,132)	RS1/16S102J
R 272	(A,28,131)	RS1/16S102J
R 274	(B,13,150)	RS1/16S103J
R 275	(B,42,127)	RS1/16S104J
R 276	(B,40,127)	RS1/16S473J
R 278	(A,122,53)	RS1/16S0R0J
R 279	(B,122,87)	RS1/16S472J
R 280	(B,120,87)	RS1/16S472J
R 281	(A,47,66)	RS1/16S153J
R 282	(A,155,83)	RS1/16S102J

Circuit Symbol and No.		Part No.
R 284	(A,53,57)	RS1/16S0R0J
R 285	(B,53,61)	RS1/16S473J
R 286	(B,57,61)	RS1/16S473J
R 287	(A,54,57)	RS1/16S183J
R 288	(A,56,57)	RS1/16S183J
R 290	(A,59,57)	RS1/16S0R0J
R 291	(B,60,61)	RS1/16S474J
R 292	(B,62,61)	RS1/16S474J
R 293	(A,60,57)	RS1/16S0R0J
R 294	(A,62,57)	RS1/16S0R0J
R 295	(B,60,71)	RS1/16S470J
R 296	(B,61,71)	RS1/16S470J
R 297	(B,65,65)	RS1/16S0R0J
R 298	(B,65,67)	RS1/16S0R0J
R 299	(A,68,65)	RS1/16S0R0J
R 300	(A,68,67)	RS1/16S0R0J
R 301	(B,65,64)	RS1/16S0R0J
R 302	(A,68,64)	RS1/16S0R0J
R 303	(B,65,69)	RS1/16S474J
R 304	(B,67,72)	RS1/16S474J
R 305	(A,68,69)	RS1/16S123J
R 306	(A,68,74)	RS1/16S123J
R 307	(B,67,71)	RS1/16S0R0J
R 308	(A,50,60)	RS1/16S153J
R 309	(A,47,61)	RS1/16S0R0J
R 310	(A,51,56)	RS1/16S474J
R 326	(A,61,96)	RS1/16SS0R0J
R 327	(A,65,92)	RS1/16SS0R0J
R 328	(A,74,92)	RS1/16SS0R0J
R 391	(A,22,71)	RS1/16S104J
R 392	(A,29,71)	RS1/16S104J
R 393	(A,25,69)	RS1/16S223J
R 394	(A,26,69)	RS1/16S223J
R 395	(A,19,69)	RS1/16S223J
R 396	(A,32,69)	RS1/16S223J
R 397	(A,23,61)	RS1/16S183J
R 398	(A,28,61)	RS1/16S183J
R 399	(A,19,65)	RS1/16S183J
R 400	(A,32,65)	RS1/16S183J
R 401	(A,36,59)	RS1/16S471J
R 402	(A,33,59)	RS1/16S103J
R 403	(A,36,56)	RS1/16S103J
R 421	(A,81,115)	RS1/16S750J
R 423	(A,82,110)	RS1/16SS101J
R 424	(A,80,110)	RS1/16SS101J
R 434	(B,91,106)	RS1/16SS0R0J
R 435	(B,86,106)	RS1/16SS0R0J
R 436	(B,81,106)	RS1/16SS0R0J
R 451	(B,49,108)	RS1/16S510J
R 452	(B,58,108)	RS1/16S510J
R 453	(B,67,108)	RS1/16S510J
R 454	(B,76,108)	RS1/16S22R0D
R 455	(A,65,106)	RS1/16S223J
R 456	(A,56,106)	RS1/16S223J
R 457	(A,59,104)	RS1/16S1201D
R 458	(A,56,104)	RS1/16S1001D
R 459	(A,72,111)	RS1/16S101J
R 460	(A,73,105)	RS1/16S101J
R 461	(A,73,116)	RS1/16S101J
R 476	(B,49,83)	RS1/16S0R0J

Circuit Symbol and No.		Part No.
R 478	(B,49,82)	RS1/16S0R0J
R 479	(B,47,92)	RS1/16SS0R0J
R 491	(A,43,68)	RS1/16S681J
R 492	(A,41,60)	RS1/16S821J
R 493	(A,43,70)	RS1/16S0R0J
R 494	(A,38,68)	RS1/16S102J
R 495	(A,38,64)	RS1/16S681J
R 496	(A,43,60)	RS1/16S0R0J
R 497	(A,43,71)	RS1/16S303J
R 498	(A,41,71)	RS1/16S223J
R 511	(A,66,87)	RS1/16S102J
R 512	(B,73,83)	RS1/16S102J
R 513	(B,73,85)	RS1/16S102J
R 514	(B,73,82)	RS1/16S102J
R 515	(B,73,80)	RS1/16S102J
R 516	(A,76,89)	RS1/16S103J
R 517	(A,76,72)	RS1/16S510J
R 518	(A,76,67)	RS1/16S510J
R 519	(A,76,61)	RS1/16S510J
R 520	(A,79,74)	RS1/16S750J
R 521	(A,79,69)	RS1/16S750J
R 522	(A,79,63)	RS1/16S750J
R 523	(A,82,72)	RS1/16S101J
R 524	(A,82,66)	RS1/16S101J
R 525	(A,82,61)	RS1/16S101J
R 526	(A,81,87)	RS1/16S0R0J
R 551	(A,115,60)	RS1/16S102J
R 552	(A,101,61)	RS1/16S472J
R 553	(A,105,68)	RS1/16S101J
R 554	(A,108,68)	RS1/16S101J
R 555	(A,105,70)	RS1/16S150J
R 556	(A,108,70)	RS1/16S470J
R 561	(A,97,60)	RS1/16S681J
R 562	(A,97,61)	RS1/16S472J
R 563	(A,93,63)	RS1/16S102J
R 564	(A,91,66)	RS1/16S102J
R 565	(A,93,66)	RS1/16S681J
R 566	(A,90,59)	RS1/16S102J
R 567	(A,93,59)	RS1/16S471J
R 571	(A,141,87)	RS1/16S0R0J
R 572	(A,140,87)	RS1/16S0R0J
R 573	(A,138,87)	RS1/16S0R0J
R 574	(A,137,87)	RS1/16S0R0J
R 578	(A,131,87)	RS1/16S0R0J
R 579	(A,129,87)	RS1/16S0R0J
R 580	(A,128,87)	RS1/16S0R0J
R 581	(A,126,87)	RS1/16S471J
R 582	(A,125,87)	RS1/16S471J
R 583	(A,123,87)	RS1/16S471J
R 584	(A,122,87)	RS1/16S471J
R 585	(A,120,87)	RS1/16S221J
R 586	(A,119,87)	RS1/16S221J
R 587	(B,105,103)	RS1/16S101J
R 588	(B,105,106)	RS1/16S472J
R 589	(B,106,111)	RAB4CQ121J
R 590	(B,108,111)	RAB4CQ121J
R 591	(B,104,111)	RS1/16S472J
R 592	(A,109,75)	RS1/16S103J
R 593	(A,107,74)	RS1/16S103J
R 594	(A,100,87)	RS1/16S0R0J

Circuit Symbol and No.		Part No.
R 595	(A,100,84)	RS1/16S0R0J
R 596	(A,99,87)	RS1/16S0R0J
R 597	(A,98,84)	RS1/16S0R0J
R 598	(A,97,87)	RS1/16S0R0J
R 599	(A,97,84)	RS1/16S0R0J
R 600	(A,96,87)	RS1/16S0R0J
R 601	(A,95,84)	RS1/16S0R0J
R 602	(A,94,87)	RS1/16S0R0J
R 603	(B,108,102)	RS1/16S101J
R 604	(B,103,100)	RS1/16S0R0J
R 605	(B,106,90)	RS1/16S0R0J
R 631	(B,104,68)	RS1/16S102J
R 632	(A,110,80)	RS1/16S103J
R 633	(A,109,80)	RS1/16S103J
R 636	(B,110,64)	RS1/16S0R0J
R 651	(A,37,9)	RS1/16S104J
R 652	(B,56,33)	RS1/16S0R0J
R 653	(B,55,33)	RS1/16S0R0J
R 654	(B,53,33)	RS1/16S102J
R 655	(B,52,33)	RS1/16S822J
R 656	(B,50,33)	RS1/16S0R0J
R 657	(B,49,33)	RS1/16S221J
R 658	(B,40,33)	RS1/16S221J
R 659	(B,40,31)	RS1/16S102J
R 660	(B,40,30)	RS1/16S102J
R 661	(B,33,25)	RS1/16S0R0J
R 662	(B,40,26)	RS1/16S0R0J
R 663	(B,27,7)	RS1/16S0R0J
R 664	(B,14,9)	RS1/16S102J
R 665	(B,14,7)	RS1/16S102J
R 666	(B,17,6)	RS1/16S0R0J
R 667	(A,31,6)	RS1/16S152J
R 668	(A,27,10)	RS1/16S103J
R 669	(A,38,7)	RS1/16S104J
R 670	(A,52,7)	RS1/16S221J
R 671	(A,35,32)	RS1/16S102J
R 672	(A,29,32)	RS1/16S103J
R 673	(A,25,32)	RS1/16S223J
R 674	(A,25,34)	RS1/16S473J
R 675	(A,33,37)	RS1/16S472J
R 676	(A,33,39)	RS1/16S472J
R 677	(A,30,41)	RS1/16S102J
R 678	(A,28,41)	RS1/16S102J
R 679	(A,49,34)	RS1/16S223J
R 680	(A,49,33)	RS1/16S103J
R 681	(A,43,9)	RS1/16S182J
R 682	(A,40,9)	RS1/16S182J
R 683	(A,55,7)	RS1/16S221J
R 684	(A,29,7)	RS1/16S152J
R 685	(A,52,33)	RS1/16S103J
R 686	(A,56,31)	RS1/16SS152J
R 687	(A,56,30)	RS1/16SS152J
R 688	(A,64,7)	RS1/16S221J
R 689	(A,61,7)	RS1/16S221J
R 690	(A,58,7)	RS1/16S221J
R 691	(B,24,8)	RS1/16S0R0J
R 701	(A,55,26)	RS1/16S151J
R 702	(A,55,24)	RS1/16S0R0J
R 703	(A,55,23)	RS1/16S151J
R 704	(A,55,21)	RS1/16S151J

Circuit Symbol and No.		Part No.
R 705	(A,55,19)	RS1/16S151J
R 706	(A,55,17)	RS1/16S0R0J
R 708	(A,56,13)	RS1/16S0R0J
R 709	(A,56,11)	RS1/16S0R0J
R 710	(A,53,10)	RS1/16S0R0J
R 711	(A,48,108)	RS1/16S0R0J
R 712	(A,35,110)	RS1/16S0R0J
R 714	(A,55,94)	RS1/16S471J
R 715	(A,58,93)	RS1/16S102J
R 716	(A,55,92)	RS1/16S471J
R 717	(A,58,91)	RS1/16S0R0J
R 718	(A,55,91)	RS1/16S0R0J
R 719	(A,58,90)	RS1/16S0R0J
R 720	(B,51,82)	RS1/16S152J
R 721	(B,53,82)	RS1/16S152J
R 723	(A,55,88)	RS1/16S0R0J
R 724	(A,55,87)	RS1/16S0R0J
R 725	(A,55,85)	RS1/16S0R0J
R 726	(B,53,86)	RS1/16S0R0J
R 727	(A,59,88)	RS1/16S0R0J
R 728	(A,56,14)	RS1/16S102J
R 751	(A,80,118)	RS1/16S0R0J
R 752	(A,84,117)	RS1/16S47R0D
R 753	(B,81,125)	RS1/16S0R0J
R 760	(B,83,125)	RS1/16S0R0J
R 761	(B,85,125)	RS1/16S0R0J
R 762	(B,87,125)	RS1/16S0R0J
R 763	(A,88,117)	RS1/16S472J
R 764	(A,95,114)	RS1/16S0R0J
R 765	(A,96,117)	RS1/16S0R0J
R 766	(B,4,119)	RS1/16S473J
R 767	(B,6,122)	RS1/16S473J
R 768	(B,45,127)	RS1/16S0R0J
R 769	(B,46,127)	RS1/16S0R0J
R 770	(B,49,127)	RS1/16S0R0J
R 771	(B,52,127)	RS1/16S0R0J
R 772	(B,51,127)	RS1/16S0R0J
R 773	(A,82,118)	RS1/16S4R7J
R 774	(A,70,116)	RS1/16S0R0J
R 775	(A,68,121)	RS1/16S0R0J
R 776	(A,69,118)	RS1/16S0R0J
R 777	(A,68,122)	RS1/16S0R0J
R 778	(A,93,117)	RS1/16S0R0J
R 779	(A,86,114)	RS1/16S223J
R 780	(A,93,114)	RS1/16S0R0J
R 851	(B,49,70)	RS1/16S104J
R 853	(B,75,117)	RS1/16S104J
R 855	(B,52,75)	RS1/16S471J
R 856	(B,71,114)	RS1/16S152J
R 858	(B,56,73)	RS1/16S473J
R 859	(B,42,67)	RS1/16S223J
R 860	(B,43,67)	RS1/16S223J
R 861	(B,41,69)	RS1/16S223J
R 862	(B,48,65)	RS1/16S223J
R 863	(B,46,70)	RS1/16S223J
R 864	(B,48,62)	RS1/16S223J
R 865	(B,46,57)	RS1/16S223J
R 866	(B,41,57)	RS1/16S223J
R 867	(B,43,59)	RS1/16S223J
R 868	(B,42,59)	RS1/16S223J
R 869	(B,52,70)	RS1/16S473J
R 871	(B,98,116)	RS1/16S1502D
R 872	(B,98,120)	RS1/16S2202D
R 873	(B,100,116)	RS1/16S471J
R 874	(B,110,116)	RS1/16S471J
R 875	(B,84,150)	RS1/16S331J
R 876	(B,76,146)	RS1/16S331J
R 878	(B,71,113)	RS1/16S122J
R 879	(A,46,138)	RS1/16SS103J
R 880	(B,68,129)	RS1/16SS104J
R 881	(B,66,127)	RS1/16SS473J
R 882	(B,61,138)	RS1/16SS104J
R 883	(B,64,138)	RS1/16SS473J
R 884	(B,54,137)	RS1/16SS104J
R 885	(B,51,136)	RS1/16SS473J
R 886	(B,68,119)	RS1/16SS104J
R 887	(B,70,121)	RS1/16SS473J
R 888	(B,48,142)	RS1/16SS104J
R 889	(B,46,143)	RS1/16SS473J
R 890	(B,46,139)	RS1/16SS104J
R 891	(B,48,141)	RS1/16SS473J
R 892	(B,50,144)	RS1/16SS472J
R 893	(B,54,139)	RS1/16SS102J
R 894	(B,64,136)	RS1/16SS102J
R 895	(B,46,137)	RS1/16SS102J
R 951	(A,88,92)	RS1/16S0R0J
R 3001	(A,148,27)	RS1/16S471J
R 3002	(A,151,28)	RS1/16S680J
R 3003	(A,148,29)	RS1/16S680J
R 3004	(A,149,31)	RS1/16S473J
R 3005	(A,151,31)	RS1/16S102J
R 3006	(B,136,34)	RS1/16S102J
R 3007	(A,149,32)	RS1/16S102J
R 3008	(A,147,35)	RS1/16S105J
R 3009	(B,139,36)	RS1/16SS473J
R 3010	(A,149,42)	RS1/16SS473J
R 3011	(A,151,41)	RS1/16S221J
R 3012	(A,149,41)	RS1/16S221J
R 3013	(A,147,41)	RS1/16SS104J
R 3014	(A,149,43)	RS1/16S680J
R 3015	(A,149,45)	RS1/16S680J
R 3016	(A,145,44)	RS1/16SS473J
R 3017	(A,145,46)	RAB4CQ221J
R 3018	(A,142,47)	RS1/16S102J
R 3019	(A,139,46)	RAB4CQ471J
R 3020	(B,139,41)	RS1/16SS473J
R 3021	(B,138,41)	RS1/16SS473J
R 3023	(A,136,46)	RS1/16S102J
R 3024	(B,138,43)	RS1/16SS473J
R 3026	(B,137,41)	RS1/16SS473J
R 3028	(B,136,41)	RS1/16SS473J
R 3030	(B,135,41)	RS1/16SS473J
R 3032	(B,134,41)	RS1/16SS473J
R 3034	(B,133,41)	RS1/16SS473J
R 3035	(A,132,46)	RAB4CQ471J
R 3036	(B,132,41)	RS1/16SS473J
R 3037	(B,131,41)	RS1/16SS473J
R 3038	(B,130,41)	RS1/16SS473J
R 3039	(A,126,42)	RS1/16S102J
R 3040	(B,131,33)	RS1/16S104J

Circuit Symbol and No.			Part No.
R	3041	(B,129,41)	RS1/16SS473J
R	3042	(A,126,40)	RS1/16S102J
R	3043	(A,126,38)	RAB4CQ221J
R	3044	(B,131,38)	RS1/16SS473J
R	3045	(B,126,36)	RS1/16S221J
R	3046	(B,131,37)	RS1/16SS473J
R	3048	(A,126,19)	RS1/16S103J
R	3049	(A,130,23)	RS1/16S104J
R	3050	(A,129,16)	RS1/16S474J
R	3051	(A,135,25)	RAB4CQ102J
R	3052	(A,139,25)	RS1/16SS473J
R	3053	(A,140,25)	RS1/16SS473J
R	3054	(A,141,25)	RS1/16SS473J
R	3055	(B,139,31)	RS1/16S221J
R	3056	(A,143,25)	RAB4CQ221J
R	3057	(B,134,29)	RS1/16SS473J
R	3058	(A,138,25)	RS1/16SS473J
R	3059	(A,137,25)	RS1/16SS473J
R	3060	(A,132,25)	RS1/16SS473J
R	3061	(A,131,24)	RS1/16SS473J
R	3062	(A,122,40)	RS1/16SS473J
R	3063	(A,123,40)	RS1/16SS473J
R	3064	(A,147,45)	RS1/16SS473J
R	3101	(A,69,53)	RS1/16S0R0J
R	3102	(A,75,53)	RS1/16SS473J
R	3103	(A,70,45)	RS1/16S0R0J
R	3104	(A,71,42)	RS1/16S0R0J
R	3105	(A,72,42)	RS1/16S0R0J
R	3106	(A,74,42)	RS1/16S0R0J
R	3107	(A,76,42)	RS1/16S0R0J
R	3108	(A,78,44)	RS1/16SS473J
R	3109	(A,78,45)	RS1/16SS473J
R	3110	(A,78,46)	RS1/16SS473J
R	3151	(A,65,20)	RS1/16SS0R0J
R	3152	(A,60,17)	RS1/16SS104J
R	3153	(A,60,21)	RS1/16SS104J
R	3155	(A,71,27)	RS1/16S153J
R	3156	(A,63,11)	RS1/16SS0R0J
R	3157	(A,73,27)	RS1/16S0R0J
R	3158	(A,76,39)	RS1/16S0R0J
R	3159	(A,73,39)	RS1/16S0R0J
R	3160	(A,75,39)	RS1/16S0R0J
R	3161	(A,71,39)	RS1/16S0R0J
R	3162	(A,68,39)	RS1/16S0R0J
R	3163	(A,66,39)	RAB4CQ0R0J
R	3164	(A,65,33)	RS1/16S102J
R	3165	(A,71,26)	RS1/16S0R0J
R	3166	(A,62,20)	RS1/16SS0R0J
R	3201	(B,32,133)	RS1/16S102J
R	3202	(B,32,134)	RS1/16S102J
R	3203	(B,31,137)	RS1/16S473J
R	3204	(B,29,131)	RS1/16S102J
R	3205	(B,24,131)	RS1/16S680J
R	3251	(A,79,31)	RS1/16S0R0J
R	3252	(A,78,36)	RS1/16S0R0J
R	3253	(A,84,30)	RS1/16S0R0J
R	3254	(A,82,36)	RS1/16S0R0J
R	3301	(A,112,6)	RS1/16SS221J
R	3302	(A,105,8)	RS1/16SS221J
R	3303	(A,109,6)	RS1/16SS221J
R	3304	(A,112,7)	RS1/16SS221J
R	3305	(B,71,21)	RS1/16SS390J
R	3306	(B,70,22)	RS1/16SS151J
R	3307	(B,70,28)	RS1/16S390J
R	3308	(B,92,41)	RS1/16S0R0J
R	3309	(B,93,41)	RS1/16S0R0J
R	3310	(B,94,45)	RS1/16S0R0J
R	3311	(B,96,44)	RAB4CQ0R0J
R	3312	(B,99,44)	RAB4CQ151J
R	3313	(B,102,42)	RS1/16S151J
R	3314	(B,103,45)	RS1/16S102J
R	3315	(B,104,42)	RS1/16S151J
R	3316	(B,105,39)	RS1/16S182J
R	3317	(A,103,35)	RS1/16S0R0J
R	3318	(B,108,37)	RS1/16S392J
R	3319	(B,108,34)	RS1/16S392J
R	3320	(B,108,33)	RS1/16S392J
R	3321	(B,108,31)	RS1/16S182J
R	3322	(B,108,28)	RS1/16S182J
R	3323	(B,108,26)	RS1/16S182J
R	3324	(B,112,28)	RS1/16S0R0J
R	3325	(B,112,30)	RS1/16S0R0J
R	3326	(B,112,27)	RS1/16S392J
R	3327	(B,112,25)	RS1/16S392J
R	3328	(B,113,10)	RS1/16S821J
R	3329	(B,115,13)	RS1/16S105J
R	3330	(B,108,13)	RS1/16S220J
R	3331	(B,108,10)	RS1/16S392J
R	3332	(A,146,20)	RS1/16S0R0J
R	3333	(A,42,44)	RS1/16S0R0J
R	3334	(A,48,37)	RS1/16S0R0J
R	3335	(A,144,18)	RS1/16S0R0J
R	3401	(A,102,14)	RAB4CQ680J
R	3402	(A,107,14)	RAB4CQ680J
R	3403	(A,111,13)	RS1/16SS151J
R	3404	(A,112,14)	RS1/16SS101J
R	3405	(A,113,14)	RS1/16SS151J
R	3406	(A,115,14)	RAB4CQ151J
R	3407	(A,118,14)	RAB4CQ151J
R	3408	(A,118,31)	RAB4CQ151J
R	3409	(A,115,31)	RS1/16SS473J
R	3410	(A,112,31)	RS1/16SS101J
R	3411	(A,108,31)	RAB4CQ101J
R	3412	(A,103,31)	RAB4CQ101J
R	3413	(A,113,31)	RS1/16SS0R0J
R	3451	(A,98,23)	RS1/16SS473J
R	3501	(A,114,41)	RAB4CQ221J
R	3503	(A,101,53)	RS1/16S0R0J
R	3504	(A,97,43)	RS1/16S0R0J
R	3505	(A,105,35)	RAB4CQ0R0J
R	3506	(A,108,35)	RS1/16S0R0J
R	3507	(A,109,35)	RS1/16S0R0J
R	3509	(A,42,114)	RS1/16S151J
R	3510	(A,48,114)	RS1/16S151J
R	3511	(A,47,114)	RS1/16S151J
R	3512	(A,53,114)	RS1/16S151J
R	3513	(B,55,127)	RS1/16S151J
R	3514	(B,57,127)	RS1/16S151J
R	3515	(B,52,121)	RS1/16S151J
R	3551	(A,89,41)	RS1/16S0R0J

Circuit Symbol and No.	Part No.
R 3552 (A,94,44)	RS1/16S0R0J
R 3553 (A,94,46)	RS1/16S151J
R 3554 (A,94,48)	RS1/16S0R0J
R 3555 (B,57,121)	RS1/16S151J
R 3556 (B,58,120)	RS1/16S151J
R 3557 (A,83,45)	RAB4CQ221J
R 3605 (B,55,121)	RS1/16S223J
R 3606 (B,53,121)	RS1/16S223J
R 3607 (A,43,117)	RS1/16S223J
R 3608 (A,46,117)	RS1/16S223J
R 3609 (A,49,117)	RS1/16S223J
R 3610 (A,52,117)	RS1/16S223J
R 3611 (B,57,131)	RS1/16S223J
R 3612 (B,55,131)	RS1/16S223J
R 3613 (B,60,120)	RS1/16S223J
R 3656 (A,55,46)	RS1/16S103J
R 3657 (A,57,46)	RS1/16S332J
R 3671 (B,129,16)	RS1/16S1001D
R 3672 (B,131,16)	RS1/16S1101D
R 3681 (A,59,41)	RS1/16S102J
R 3701 (B,31,5)	RS1/16S0R0J
R 3702 (B,31,7)	RS1/16S0R0J
R 3703 (B,32,9)	RS1/16S0R0J
R 3704 (A,27,27)	RS1/16S0R0J
R 3705 (A,29,27)	RS1/16S0R0J
R 3706 (A,30,27)	RS1/16S0R0J
R 3707 (A,32,27)	RS1/16S0R0J
R 3708 (A,33,27)	RS1/16S0R0J
R 3709 (A,35,27)	RS1/16S0R0J
R 3710 (A,36,27)	RS1/16S0R0J
R 3711 (A,38,27)	RS1/16S0R0J
R 3712 (A,39,27)	RS1/16S0R0J
R 3713 (B,33,14)	RS1/16S0R0J
R 3714 (B,33,15)	RS1/16S0R0J
R 3715 (B,33,17)	RS1/16S0R0J
R 3716 (B,34,19)	RS1/16S0R0J
R 3721 (B,64,15)	RS1/16SS0R0J
R 3722 (B,64,14)	RS1/16SS0R0J
R 3723 (B,64,13)	RS1/16SS0R0J
R 3724 (B,64,12)	RS1/16SS0R0J
R 3725 (B,64,16)	RS1/16SS0R0J
R 3726 (B,63,17)	RS1/16SS0R0J
R 3727 (B,62,18)	RS1/16SS0R0J
R 3728 (B,62,19)	RS1/16SS0R0J
R 3729 (B,64,11)	RS1/16SS0R0J
R 3730 (B,64,10)	RS1/16SS0R0J
R 3731 (B,64,9)	RS1/16SS0R0J
R 3732 (B,64,8)	RS1/16SS0R0J
R 3733 (A,63,9)	RS1/16SS104J
R 3734 (A,60,13)	RS1/16SS0R0J
R 3735 (A,61,11)	RS1/16SS104J

CAPACITORS

Circuit Symbol and No.	Part No.
C 101 (B,94,89) 220 µF/10 V	CCH1409
C 102 (B,88,67)	CKSRYB104K25
C 103 (A,119,69)	CCSRCH5R0C50
C 104 (A,119,72)	CCSRCH5R0C50
C 105 (A,117,81)	CKSRYB104K25
C 106 (A,118,81)	CKSRYB102K50
C 107 (B,93,66)	CKSRYB105K10
C 108 (B,126,67)	CCSRCH470J50
C 109 (B,126,65)	CCSRCH470J50
C 110 (B,123,62)	CKSRYB103K50
C 111 (A,121,79)	CKSRYB105K10
C 112 (A,117,78)	CKSYB475K16
C 113 (B,131,80)	CKSRYB474K10
C 114 (A,152,81)	CKSRYB103K50
C 116 (A,151,58)	CKSRYB104K25
C 234 (B,96,95) 10 µF	CCG1171
C 236 (A,101,73)	CKSRYB105K10
C 238 (B,16,153) 10 µF	CCG1182
C 239 (B,96,104)	CKSRYB105K10
C 240 (A,7,104)	CEVLW220M16
C 241 (B,29,20) 22 µF	CCG1178
C 242 (B,85,99) 220 µF/10 V	CCH1409
C 243 (A,10,114)	CKSRYB104K25
C 244 (A,10,109)	CKSRYB105K10
C 245 (B,19,103)	CEVLW101M6R3
C 246 (A,26,21)	CKSRYB105K10
C 247 (B,9,152)	CKSRYB105K10
C 249 (A,98,69)	CKSRYB103K50
C 250 (B,29,107)	CKSRYB104K25
C 251 (A,24,135)	CKSRYB104K25
C 252 (B,7,104)	CEVLW220M16
C 253 (A,98,73)	CKSRYB105K10
C 255 (B,10,129)	CKSRYB104K25
C 281 (A,47,64)	CKSRYB105K10
C 282 (A,53,78)	CKSRYB104K25
C 283 (A,47,74) 10 µF	CCG1171
C 284 (B,56,67)	CKSRYB104K25
C 285 (A,47,72) 10 µF	CCG1171
C 286 (A,47,68) 10 µF	CCG1171
C 287 (A,47,70) 10 µF	CCG1171
C 288 (B,57,89)	CEVLW220M16
C 289 (A,47,75)	CKSRYB104K25
C 290 (B,52,58)	CKSRYB474K10
C 291 (B,54,58) 10 µF	CCG1171
C 292 (B,56,58) 10 µF	CCG1171
C 293 (B,55,64)	CKSRYB104K25
C 294 (B,56,64)	CKSRYB104K25
C 295 (A,61,79) 10 µF	CCG1171
C 296 (A,59,79) 10 µF	CCG1171
C 298 (B,58,58)	CKSRYB105K10
C 299 (B,60,58)	CKSRYB105K10
C 300 (B,68,58)	CKSRYB105K10
C 301 (B,60,64)	CKSRYB104K25
C 302 (B,62,64)	CKSRYB104K25
C 303 (B,67,65)	CKSRYB105K10
C 304 (B,67,67)	CKSRYB105K10
C 305 (B,62,66)	CKSRYB104K25
C 306 (B,62,68)	CKSRYB104K25
C 307 (B,67,64)	CKSRYB104K25
C 308 (A,68,71)	CKSRYB105K10
C 309 (B,67,69)	CKSRYB105K10
C 310 (A,68,72)	CKSRYB105K10
C 311 (A,50,58)	CKSRYB105K10
C 312 (A,47,63)	CKSRYB105K10
C 313 (B,55,61)	CKSSYB102K50
C 314 (B,56,61)	CKSSYB102K50
C 391 (A,23,69) 10 µF	CCG1171

Circuit Symbol and No.			Part No.
C 392	(A,28,69)	10 µF	CCG1171
C 393	(A,21,69)	10 µF	CCG1171
C 394	(A,30,69)	10 µF	CCG1171
C 395	(A,23,62)		CCSRCH180J50
C 396	(A,28,62)		CCSRCH180J50
C 397	(A,20,65)		CCSRCH180J50
C 398	(A,31,65)		CCSRCH180J50
C 399	(A,36,58)		CKSRYB104K25
C 400	(A,30,59)		CKSRYB102K50
C 401	(A,33,61)		CKSRYB104K25
C 402	(A,28,57)	22 µF	CCG1178
C 421	(A,80,112)	10 µF	CCG1171
C 422	(A,82,112)	10 µF	CCG1171
C 423	(A,82,104)		CKSRYB104K25
C 451	(A,59,118)		CKSRYB104K25
C 452	(B,37,104)		CEVLW101M6R3
C 453	(A,61,118)		CKSRYB104K25
C 454	(B,45,108)	22 µF	CCG1178
C 455	(B,54,108)	22 µF	CCG1178
C 456	(B,63,108)	22 µF	CCG1178
C 457	(B,72,108)	22 µF	CCG1178
C 458	(B,45,103)		CEVLW101M6R3
C 459	(B,54,103)		CEVLW101M6R3
C 460	(B,63,103)		CEVLW101M6R3
C 461	(B,72,103)		CEVLW101M6R3
C 462	(A,67,106)		CKSRYB105K10
C 463	(A,64,106)		CKSRYB105K10
C 464	(A,57,106)		CKSRYB105K10
C 465	(A,59,106)		CKSRYB104K25
C 466	(A,61,106)		CKSRYB104K25
C 467	(A,62,106)		CKSRYB105K10
C 491	(A,38,71)		CKSRYB105K10
C 512	(A,66,86)		CKSRYB105K10
C 513	(A,66,84)		CKSRYB105K10
C 514	(A,66,83)		CKSRYB105K10
C 515	(A,66,80)		CKSRYB105K10
C 516	(A,66,78)		CKSRYB105K10
C 517	(A,66,77)		CKSRYB105K10
C 518	(A,66,75)		CKSRYB105K10
C 519	(A,66,81)		CKSRYB104K25
C 520	(B,86,89)		CEVLW101M6R3
C 521	(B,83,82)	22 µF	CCG1178
C 522	(B,78,88)		CEVLW101M6R3
C 523	(B,73,88)	22 µF	CCG1178
C 524	(B,68,90)		CEVLW101M6R3
C 525	(B,63,91)	22 µF	CCG1178
C 526	(A,78,86)		CKSRYB104K25
C 527	(A,78,83)		CKSRYB104K25
C 528	(A,78,80)		CKSRYB104K25
C 529	(A,79,78)		CKSRYB105K10
C 530	(A,79,76)		CKSRYB105K10
C 551	(A,108,67)		CKSRYB102K50
C 552	(A,105,67)		CKSRYB102K50
C 553	(A,102,61)		CKSRYB104K25
C 561	(A,89,66)		CKSRYB102K50
C 571	(A,106,142)	2 200 µF/16 V	CCH1405(P35)
C 631	(B,110,72)		CKSRYB104K25
C 632	(B,100,75)		CKSRYB104K25
C 651	(B,22,20)		CEVLW100M16
C 652	(B,14,14)		CKSRYB104K25

Circuit Symbol and No.			Part No.
C 653	(B,17,15)		CKSRYB103K50
C 655	(B,27,5)		CKSRYB104K25
C 656	(A,29,33)		CKSRYB103K50
C 657	(A,29,35)		CKSRYB103K50
C 659	(A,54,35)		CKSRYB104K25
C 751	(B,43,127)		CCSRCH471J50
C 851	(B,75,116)		CKSRYB471K50
C 853	(B,75,114)		CKSRYB104K25
C 854	(B,57,73)		CCSRCH100D50
C 855	(B,49,75)		CKSRYB105K10
C 857	(B,39,66)	10 µF	CCG1171
C 858	(B,39,68)	10 µF	CCG1171
C 859	(B,50,65)		CCSRCH180J50
C 860	(B,46,68)		CCSRCH180J50
C 861	(B,50,62)		CCSRCH180J50
C 862	(B,46,58)		CCSRCH180J50
C 863	(B,39,61)	10 µF	CCG1171
C 864	(B,39,59)	10 µF	CCG1171
C 867	(B,60,132)		CKSRYB105K10
C 868	(B,43,63)		CKSRYB105K10
C 871	(B,100,120)		CCSRCH101J50
C 872	(B,100,126)		CKSRYB102K50
C 873	(B,106,122)		CCSRCH101J50
C 874	(B,104,149)		CEVLW220M16
C 875	(B,100,149)		CKSQYB475K6R3
C 876	(B,79,151)		CKSRYB104K25
C 3001	(A,147,38)		CKSSYB104K10
C 3002	(B,134,31)		CKSRYB105K10
C 3003	(A,126,35)		CKSSYB104K10
C 3004	(A,131,19)		CKSRYB103K50
C 3103	(A,78,49)		CCSRCH681J50
C 3104	(A,75,55)	2.2 µF	CCG1179
C 3105	(A,71,54)	10 µF	CCG1171
C 3106	(A,70,50)	10 µF	CCG1171
C 3107	(A,74,53)		CKSSYB104K10
C 3108	(A,73,53)		CKSSYB104K10
C 3109	(A,71,51)		CKSSYB104K10
C 3151	(A,66,11)		CKSSYB104K10
C 3152	(A,62,30)	10 µF	CCG1171
C 3153	(A,64,30)		CKSSYB104K10
C 3154	(A,72,22)	10 µF	CCG1171
C 3155	(A,72,24)		CKSSYB104K10
C 3156	(A,66,23)		CCSRCH100D50
C 3157	(A,68,23)		CCSRCH100D50
C 3201	(B,38,140)		CKSRYB104K25
C 3202	(B,28,131)		CKSRYB104K25
C 3203	(B,25,129)		CCSRCH470J50
C 3253	(A,86,28)		CCSRCH100D50
C 3254	(A,82,33)		CKSRYB105K10
C 3255	(A,82,35)		CCSRCH100D50
C 3256	(A,81,42)		CKSRYB105K10
C 3257	(A,86,32)		CKSSYB104K10
C 3258	(A,90,38)		CKSSYB104K10
C 3259	(A,92,34)		CKSSYB104K10
C 3260	(A,82,52)		CSZSR470M10
C 3301	(B,101,7)		CKSSYB104K10
C 3302	(B,98,7)		CKSSYB104K10
C 3303	(B,96,7)		CKSSYB104K10
C 3304	(B,94,7)		CKSSYB104K10
C 3305	(B,92,7)		CKSSYB104K10

Circuit Symbol and No.		Part No.
C 3306	(B,89,7)	CKSSYB104K10
C 3307	(B,87,7)	CKSSYB104K10
C 3308	(B,85,7)	CKSSYB104K10
C 3309	(B,83,7)	CKSSYB104K10
C 3310	(B,81,7)	CKSSYB104K10
C 3311	(B,80,6)	CKSSYB104K10
C 3312	(B,78,6)	CKSSYB104K10
C 3313	(B,76,7)	CKSSYB104K10
C 3314	(B,72,10)	CKSSYB104K10
C 3315	(B,72,12)	CKSSYB104K10
C 3316	(B,71,16)	CKSSYB104K10
C 3317	(B,72,17)	CKSSYB104K10
C 3318	(B,72,19)	CKSSYB104K10
C 3319	(B,71,24)	CKSSYB104K10
C 3320	(B,71,26)	CKSSYB104K10
C 3321	(B,71,30)	CKSSYB104K10
C 3322	(B,72,32)	CKSSYB104K10
C 3323	(B,72,34)	CKSSYB104K10
C 3324	(B,72,36)	CKSSYB104K10
C 3325	(B,76,41)	CKSSYB104K10
C 3326	(B,78,41)	CKSSYB104K10
C 3327	(B,81,41)	CKSSYB104K10
C 3328	(B,83,41)	CKSSYB104K10
C 3329	(B,85,41)	CKSSYB104K10
C 3330	(B,87,41)	CKSSYB104K10
C 3331	(B,90,41)	CKSSYB104K10
C 3332	(B,95,41)	CKSSYB104K10
C 3333	(B,98,41)	CKSSYB104K10
C 3334	(B,106,37)	CKSSYB104K10
C 3335	(B,106,34)	CKSSYB104K10
C 3336	(B,106,30)	CKSSYB104K10
C 3338	(B,106,26)	CKSSYB104K10
C 3339	(B,106,23)	CKSSYB104K10
C 3340	(B,106,19)	CKSSYB104K10
C 3341	(B,106,16)	CKSSYB104K10
C 3342	(B,108,16)	CKSSYB104K10
C 3343	(B,109,19) 10 µF	CCG1171
C 3344	(B,112,15)	CKSRYB104K25
C 3345	(B,117,10)	CCSRCH9R0D50
C 3346	(B,117,15)	CCSRCH9R0D50
C 3347	(B,106,11)	CKSSYB104K10
C 3348	(B,106,9)	CKSSYB104K10
C 3401	(B,123,17)	CEVLW101M6R3
C 3402	(A,100,15)	CKSSYB104K10
C 3403	(A,105,15)	CKSSYB104K10
C 3404	(A,110,15)	CKSSYB104K10
C 3405	(A,121,15)	CKSSYB104K10
C 3406	(A,111,30)	CKSSYB104K10
C 3407	(A,106,31)	CKSSYB104K10
C 3451	(A,98,12) 10 µF	CCG1171
C 3452	(A,98,18)	CKSSYB104K10
C 3501	(A,112,37) 10 µF	CCG1171
C 3502	(A,111,37)	CKSSYB104K10
C 3503	(A,115,49) 10 µF	CCG1171
C 3504	(A,115,47) 10 µF	CCG1171
C 3505	(A,115,45) 10 µF	CCG1171
C 3506	(A,115,43) 10 µF	CCG1171
C 3507	(A,111,51) 10 µF	CCG1171
C 3508	(A,108,53) 10 µF	CCG1171
C 3509	(A,106,52)	CKSSYB104K10

Circuit Symbol and No.		Part No.
C 3510	(A,104,53) 10 µF	CCG1171
C 3511	(A,103,52)	CKSSYB104K10
C 3512	(A,99,50) 10 µF	CCG1171
C 3513	(B,114,42) 10 µF	CCG1171
C 3514	(B,110,47) 10 µF	CCG1171
C 3515	(B,110,45) 10 µF	CCG1171
C 3516	(B,110,43) 10 µF	CCG1171
C 3517	(A,95,41)	CKSSYB104K10
C 3518	(A,94,39) 10 µF	CCG1171
C 3519	(A,99,36)	CKSQYB475K6R3
C 3520	(A,113,51)	CKSRYB104K25
C 3551	(A,88,51) 10 µF	CCG1171
C 3552	(A,88,49)	CKSRYB102K50
C 3553	(A,94,51) 10 µF	CCG1171
C 3555	(A,85,49) 10 µF	CCG1171
C 3556	(A,86,51)	CKSSYB103K16
C 3651	(A,60,48)	CKSRYB105K10
C 3652	(A,64,50)	CKSQYB475K6R3
C 3653	(A,51,50) 47 µF	CCG1230
C 3661	(A,151,7)	CKSRYB103K50
C 3662	(A,146,12)	CKSRYB105K10
C 3663	(A,142,8)	CKSQYB475K6R3
C 3664	(A,144,8)	CKSSYB104K10
C 3671	(B,126,11)	CKSRYB105K10
C 3672	(B,123,25)	CEVLW101M6R3
C 3673	(B,126,9)	CKSRYB105K10
C 3674	(B,126,8)	CKSRYB105K10
C 3681	(A,62,38)	CKSRYB105K10
C 3682	(A,57,38)	CKSRYB103K50
C 3683	(A,59,34)	CKSQYB475K6R3
C 3684	(A,59,35)	CKSSYB104K10
C 3691	(A,73,137) 0.1µF/5.5 V	CCL1059
C 3692	(A,50,43)	CKSRYB105K10
C 3693	(A,52,43)	CKSRYB103K50
C 3694	(A,54,38)	CKSRYB105K10

B

Unit Number :
Unit Name : Keyboard Unit

MISCELLANEOUS

IC 7001	(B,125,12) IC	PD2073A
IC 7002	(B,17,17) IC	BD4834G
IC 7003	(A,31,12) IC	SBX3050-01
Q 7001	(B,18,11) Transistor	DTC123JU
Q 7151	(A,115,13) Transistor	DTC123JU
Q 7201	(A,30,20) Transistor	DTC114EE
Q 7202	(A,33,21) Transistor	EMD9
Q 7203	(A,31,17) Transistor	EMD9
Q 7204	(A,24,14) Transistor	DTC114EE
Q 7205	(A,23,11) Transistor	EMD9
Q 7206	(A,25,11) Transistor	EMD9
D 7101	(B,11,16) Diode	EDZ6R8(B)
D 7102	(B,6,16) Diode	EDZ6R8(B)
D 7151	(A,112,12) White LED	NESW505C-5273
D 7207	(A,26,20) LED	CL-196HR-CD(AB)
D 7208	(A,26,18) LED	NHSW046-5779
D 7251	(A,123,18) LED	NHSW046-5779
D 7252	(A,123,5) LED	NHSW046-5779

Circuit Symbol and No.		Part No.
D 7253	(A,26,4) LED	NHSW046-5779
D 7254	(A,123,20) LED	CL-196HR-CD(AB)
D 7255	(A,123,6) LED	CL-196HR-CD(AB)
D 7256	(A,26,6) LED	CL-196HR-CD(AB)
D 7271	(A,3,4) LED	NHSW046-5779
D 7272	(A,5,22) LED	NHSW046-5779
D 7273	(A,16,5) LED	NHSW046-5779
D 7274	(A,16,19) LED	NHSW046-5779
D 7275	(A,142,21) LED	NHSW046-5779
D 7276	(A,144,4) LED	NHSW046-5779
D 7277	(A,131,19) LED	NHSW046-5779
D 7278	(A,131,6) LED	NHSW046-5779
D 7279	(A,4,20) LED	CL-196HR-CD(AB)
D 7280	(A,4,4) LED	CL-196HR-CD(AB)
D 7281	(A,16,3) LED	CL-196HR-CD(AB)
D 7282	(A,16,22) LED	CL-196HR-CD(AB)
D 7283	(A,138,19) LED	CL-196HR-CD(AB)
D 7284	(A,144,12) LED	CL-196HR-CD(AB)
D 7285	(A,138,5) LED	CL-196HR-CD(AB)
D 7286	(A,131,12) LED	CL-196HR-CD(AB)
D 7287	(A,18,12) LED	CL-196HR-CD(AB)
D 7401	(A,34,17) Diode Network	DA204U
D 7402	(B,108,11) Diode	DAN202U
D 7403	(B,110,13) Diode	DAP202U
D 7404	(B,42,16) Diode	1SS355
D 7405	(B,30,18) Diode	DAN202U
D 7406	(B,35,18) Diode	DAN202U
X 7001	(B,114,19) Ceramic Resonator 8.18 MHz	CSS1631
S 7101	(A,21,19) Push Switch	CSG1155
S 7102	(A,21,5) Push Switch	CSG1155
S 7103	(A,118,19) Push Switch	CSG1155
S 7104	(A,118,5) Push Switch	CSG1155
S 7105	(A,9,12) Encoder(VOLUME)	CSD1140
S 7106	(A,138,12) Switch(JOYSTICK)	CSX1109
S 7401	(A,121,12) Push Switch	CSG1155
LCD7001	(A,41,4) LCD	CAW1921

RESISTORS

R 7001	(A,125,14)	RS1/16SS472J
R 7002	(A,129,21)	RAB4CQ104J
R 7003	(A,126,19)	RAB4CQ101J
R 7004	(B,41,11)	RS1/16S101J
R 7005	(A,122,17)	RS1/16SS473J
R 7006	(B,15,21)	RS1/16S102J
R 7007	(B,17,14)	RS1/16S822J
R 7008	(A,122,16)	RS1/16SS472J
R 7009	(B,21,16)	RS1/16SS472J
R 7010	(B,112,12)	RS1/16SS101J
R 7011	(B,112,11)	RS1/16SS101J
R 7012	(A,33,3)	RS1/16S470J
R 7013	(B,114,12)	RS1/16SS103J
R 7014	(B,27,14)	RS1/16S5600D
R 7015	(B,27,11)	RS1/16S1201D
R 7016	(B,25,11)	RS1/16S1501D
R 7101	(B,13,8)	RS1/16S0R0J
R 7102	(B,4,8)	RS1/16S0R0J
R 7103	(A,116,10)	RS1/16SS822J
R 7104	(A,134,4)	RS1/16SS122J
R 7105	(A,141,5)	RS1/16SS122J
R 7106	(A,139,20)	RS1/16SS182J
R 7107	(A,133,19)	RS1/16SS332J
R 7108	(A,137,20)	RS1/16SS822J
R 7151	(B,74,7)	RS1/16SS151J
R 7152	(B,77,7)	RS1/16SS101J
R 7153	(A,116,11)	RS1/16SS361J
R 7154	(A,118,12)	RS1/16SS221J
R 7201	(A,26,15)	RS1/16SS103J
R 7202	(A,26,13)	RS1/16SS103J
R 7205	(A,25,21)	RS1/16SS221J
R 7206	(A,19,22)	RS1/16SS221J
R 7207	(A,22,22)	RS1/16SS221J
R 7208	(A,24,22)	RS1/16SS221J
R 7209	(A,26,22)	RS1/16SS181J
R 7210	(A,21,16)	RS1/16SS182J
R 7211	(A,23,16)	RS1/16SS182J
R 7212	(A,24,16)	RS1/16SS151J
R 7251	(A,126,5)	RS1/16SS182J
R 7252	(A,127,5)	RS1/16SS102J
R 7253	(A,31,5)	RS1/16SS182J
R 7254	(A,29,5)	RS1/16SS182J
R 7255	(A,29,6)	RS1/16SS151J
R 7256	(A,25,7)	RS1/16SS271J
R 7257	(A,30,7)	RS1/16SS271J
R 7258	(A,30,8)	RS1/16SS271J
R 7271	(A,10,20)	RS1/16SS182J
R 7272	(A,8,20)	RS1/16SS102J
R 7273	(A,14,21)	RS1/16SS182J
R 7274	(A,13,20)	RS1/16SS102J
R 7275	(A,142,3)	RS1/16SS182J
R 7276	(A,141,4)	RS1/16SS102J
R 7277	(A,131,9)	RS1/16SS182J
R 7278	(A,130,11)	RS1/16SS102J
R 7279	(A,16,11)	RS1/16SS271J
R 7280	(A,16,9)	RS1/16SS271J
R 7281	(A,16,8)	RS1/16SS271J
R 7282	(A,17,13)	RS1/16SS271J
R 7283	(A,16,13)	RS1/16SS271J
R 7284	(A,16,15)	RS1/16SS271J
R 7285	(A,16,17)	RS1/16SS151J
R 7287	(A,131,15)	RS1/16SS221J
R 7288	(A,130,16)	RS1/16SS221J
R 7289	(A,130,14)	RS1/16SS221J
R 7401	(B,108,15)	RS1/16S221J
R 7402	(B,108,14)	RS1/16S221J
R 7403	(B,7,9)	RS1/16S513J
R 7406	(A,115,16)	RS1/16S103J
R 7407	(B,41,13)	RS1/16S101J

CAPACITORS

C 7002	(B,14,17) 2.2 μF	CCG1179
C 7004	(A,119,16)	CKSSYB104K10
C 7005	(B,114,16)	CKSSYB104K10
C 7006	(B,111,18)	CKSRYB104K10
C 7007	(B,114,15)	CKSSYB104K10
C 7008	(B,114,14)	CKSSYB104K10
C 7009	(B,114,13)	CKSSYB104K10
C 7010	(A,33,8) 10 μF	CCG1171

C

Unit Number : CWN2486
Unit Name : Sub Keyboard Unit

MISCELLANEOUS

Circuit Symbol and No.	Part No.
IC 6001 (A,109,4) IC	TPS850
Q 6001 (A,115,8) Transistor	2SA1774
D 6151 (A,20,8) LED	NHSW046-5779
D 6152 (A,7,8) LED	NHSW046-5779
D 6153 (A,34,7) LED	NHSW046-5779
D 6154 (A,130,7) LED	NHSW046-5779
D 6155 (A,144,8) LED	NHSW046-5779
D 6156 (A,156,8) LED	NHSW046-5779
D 6201 (A,34,4) LED	CL-196HR-CD(AB)
D 6202 (A,22,7) LED	CL-196HR-CD(AB)
D 6203 (A,9,7) LED	CL-196HR-CD(AB)
D 6204 (A,129,4) LED	CL-196HR-CD(AB)
D 6205 (A,142,7) LED	CL-196HR-CD(AB)
D 6206 (A,155,7) LED	CL-196HR-CD(AB)
L 6001 (A,99,8) Inductor	LCKBW100K2520
S 6101 (A,133,4) Push Switch	CSG1155
S 6102 (A,143,4) Push Switch	CSG1155
S 6103 (A,156,4) Push Switch	CSG1155
S 6104 (A,31,4) Push Switch	CSG1155
S 6105 (A,21,4) Push Switch	CSG1155
S 6106 (A,8,4) Push Switch	CSG1155

RESISTORS

Circuit Symbol and No.	Part No.
R 6001 (A,99,10)	RS1/16S104J
R 6002 (A,105,8)	RS1/16S103J
R 6003 (A,113,4)	RS1/16S822J
R 6004 (A,108,8)	RS1/16S0R0J
R 6005 (A,111,8)	RS1/16S0R0J
R 6101 (A,137,7)	RS1/16S392J
R 6102 (A,149,4)	RS1/16S123J
R 6103 (A,26,7)	RS1/16S202J
R 6104 (A,18,9)	RS1/16S392J
R 6151 (A,10,10)	RS1/16SS182J
R 6152 (A,16,10)	RS1/16SS102J
R 6153 (A,121,11)	RS1/16SS182J
R 6154 (A,118,11)	RS1/16SS102J
R 6155 (A,153,10)	RS1/16SS182J
R 6156 (A,148,10)	RS1/16SS102J
R 6201 (A,10,9)	RS1/16SS271J
R 6202 (A,12,9)	RS1/16SS271J
R 6203 (A,16,9)	RS1/16SS271J
R 6204 (A,153,9)	RS1/16SS271J
R 6205 (A,151,9)	RS1/16SS271J
R 6206 (A,148,9)	RS1/16SS271J

CAPACITORS

Circuit Symbol and No.	Part No.
C 6001 (A,104,4)	CKSRYB104K10
C 6002 (A,98,6) 4.7 μF	CCG1201

G

Unit Number : CWN2483
Unit Name : Monitor Unit

MISCELLANEOUS

Circuit Symbol and No.	Part No.
IC 4001 (A,42,87) IC	PE5605A
IC 4002 (A,61,111) IC	S-80830CNNB-B8P
IC 4004 (A,55,115) IC	S-93C56BD0I-I8
IC 4101 (A,18,84) IC	PEH111A
IC 4201 (A,34,27) IC	EDS2532AABH-6B
IC 4301 (A,32,56) IC	AX51902A
IC 4302 (A,14,61) IC	TC7SHU04FUS1
IC 5001 (A,136,52) IC	S-1132B25-U5
IC 5002 (A,121,92) IC	S-1132B15-U5
IC 5003 (A,54,110) IC	PQ1M255M2SPQ
IC 5004 (A,135,40) IC	PQ035ZN01ZPH
IC 5005 (A,144,43) IC	BA00CC0WFP
IC 5006 (A,136,83) IC	BD6171KV
IC 5102 (A,94,76) IC	TC90A96BFGSING
IC 5201 (A,60,76) IC	NJW5210RB1
IC 5202 (A,112,96) IC	TC7SET04FUS1
IC 5203 (A,68,78) IC	NJM2100V
IC 5204 (A,74,90) IC	TC7S66FU
IC 5205 (A,68,86) IC	NJM082BV
IC 5301 (A,121,101) IC	TC7SET04FUS1
IC 5302 (A,117,108) IC	TC74VHC04FTS1
IC 5402 (A,59,57) IC	TC7SHU04FUS1
IC 5403 (A,64,67) IC	PE1023A
IC 5501 (A,76,35) IC	TA78L05F
IC 5502 (A,70,26) IC	TC7SET08FUS1
IC 5503 (A,73,17) IC	OZ961ISN
IC 5504 (A,86,7) FET	SI6544BDQ
IC 5505 (A,84,14) FET	SI6544BDQ
Q 4001 (A,28,99) Transistor	DTC124EUA
Q 4701 (A,42,115) Transistor	FMG12
Q 4702 (A,43,118) Transistor	UMF5N
Q 4703 (A,48,114) Transistor	UMF5N
Q 5001 (A,146,71) FET	RSQ035P03
Q 5002 (A,127,70) FET	RSQ035P03
Q 5004 (A,126,89) Transistor	2SA1577
Q 5005 (A,132,93) Transistor	2SC4097
Q 5101 (A,90,54) Transistor	2SC4617
Q 5201 (A,62,94) Transistor	2SA1774
Q 5202 (A,64,92) Transistor	2SC4617
Q 5203 (A,64,97) Transistor	2SA1774
Q 5204 (A,61,99) Transistor	2SC4617
Q 5501 (A,65,22) Transistor	2SC4617
Q 5502 (A,67,21) Transistor	2SC4617
Q 5503 (A,64,18) Transistor	2SA1774
Q 5505 (A,47,18) Transistor	2SC4617
Q 5506 (A,47,15) Transistor	2SC4617
Q 5507 (A,43,15) Transistor	UMX2N
D 4001 (A,61,107) Diode	1SS355
D 4501 (B,97,8) LED	NHSW046-5779
D 4502 (B,110,8) LED	NHSW046-5779
D 4503 (B,123,8) LED	NHSW046-5779
D 4505 (B,97,10) LED	CL-196HR-CD(AB)
D 4506 (B,110,10) LED	CL-196HR-CD(AB)
D 4507 (B,123,10) LED	CL-196HR-CD(AB)
D 4701 (A,46,115) Diode	1SS355
D 4702 (A,39,110) Diode	UDZS5R6(B)
D 4703 (A,41,110) Diode	UDZS5R6(B)
D 4704 (A,43,110) Diode	UDZS5R6(B)
D 4705 (A,45,110) Diode	UDZS5R6(B)

Circuit Symbol and No.			Part No.
D	5001	(A,137,49) Diode	RB500V-40
D	5002	(A,122,98) Diode	RB500V-40
D	5003	(A,141,65) Diode	RB160M-30
D	5004	(A,128,66) Diode	RB160M-30
D	5005	(A,126,95) Diode	RB548W
D	5006	(A,128,95) Diode	RB548W
D	5007	(A,131,95) Diode	RB548W
D	5008	(A,126,79) Diode	RB548W
D	5009	(A,126,77) Diode	RB548W
D	5010	(A,142,97) Diode	RB500V-40
D	5011	(A,149,97) Diode	RB500V-40
D	5012	(A,140,97) Diode	RB500V-40
D	5013	(A,147,97) Diode	RB500V-40
D	5501	(A,64,25) Diode	UDZS6R2(B)
D	5502	(A,61,21) Diode	1SS355
D	5503	(A,74,28) Diode	RB751V-40
D	5504	(A,82,9) Diode	HZU6R2(B3)
D	5505	(A,80,22) Diode	HZU6R2(B3)
D	5506	(A,50,19) Diode	UDZS8R2(B)
D	5507	(A,53,12) Diode	MA143
D	5508	(A,47,12) Diode	MA143
D	5509	(A,55,14) Diode	HZU6R2(B3)
L	4001	(A,43,74) Inductor	CTF1473
L	4002	(A,46,106) Inductor	CTF1473
L	4003	(A,27,91) Inductor	CTF1473
L	4004	(A,57,93) Inductor	CTF1473
L	4005	(A,56,98) Inductor	CTF1473
L	4006	(A,46,102) Inductor	CTF1473
L	4007	(A,21,108) Inductor	CTF1306
L	4008	(A,60,115) Inductor	CTF1306
L	4101	(A,22,107) Inductor	CTF1473
L	4301	(A,51,51) Inductor	CTF1473
L	4302	(A,49,64) Inductor	CTF1473
L	4303	(A,49,56) Inductor	CTF1473
L	4304	(A,48,40) Inductor	CTF1473
L	4305	(A,47,62) Inductor	VTL1127
L	4306	(A,15,47) Inductor	CTF1473
L	4307	(A,13,64) Inductor	CTF1473
L	4308	(A,14,52) Inductor	CTF1639
L	4309	(A,14,67) Inductor	CTF1473
L	4310	(A,52,40) Inductor	CTF1395
L	4701	(A,51,114) Inductor	CTF1473
L	4702	(A,30,104) Ferrite Bead	CTF1528
L	4703	(A,31,104) Ferrite Bead	CTF1528
L	4704	(A,32,104) Ferrite Bead	CTF1528
L	4705	(A,33,104) Ferrite Bead	CTF1528
L	5002	(A,148,57) Choke Coil 10 μH	CTH1249
L	5003	(A,148,65) Choke Coil 18 μH	CTH1250
L	5004	(A,136,62) Inductor	CTF1488
L	5005	(A,130,61) Choke Coil 68 μH	CTH1318
L	5007	(A,123,78) Inductor	DTL1096
L	5101	(A,94,56) Inductor	CTF1306
L	5102	(A,82,59) Inductor	CTF1306
L	5103	(A,79,59) Inductor	CTF1306
L	5104	(A,81,59) Inductor	CTF1306
L	5105	(A,99,59) Inductor	CTF1306
L	5106	(A,107,61) Inductor	CTF1306
L	5107	(A,78,65) Inductor	CTF1306
L	5108	(A,110,64) Inductor	CTF1306
L	5109	(A,111,68) Inductor	CTF1306

Circuit Symbol and No.			Part No.
L	5110	(A,111,69) Inductor	CTF1306
L	5111	(A,78,72) Inductor	CTF1306
L	5112	(A,111,72) Inductor	CTF1306
L	5113	(A,111,71) Inductor	CTF1306
L	5114	(A,111,74) Inductor	CTF1306
L	5115	(A,78,75) Inductor	CTF1306
L	5116	(A,111,75) Inductor	CTF1306
L	5117	(A,78,78) Inductor	CTF1306
L	5118	(A,111,79) Inductor	CTF1306
L	5119	(A,111,81) Inductor	CTF1306
L	5120	(A,78,81) Inductor	CTF1306
L	5121	(A,77,83) Inductor	CTF1306
L	5122	(A,112,83) Inductor	CTF1306
L	5123	(A,111,86) Inductor	CTF1306
L	5124	(A,111,88) Inductor	CTF1306
L	5125	(A,78,86) Inductor	CTF1306
L	5126	(A,111,89) Inductor	CTF1306
L	5127	(A,104,93) Inductor	VTL1133
L	5128	(A,107,93) Inductor	VTL1133
L	5129	(A,107,91) Inductor	VTL1133
L	5130	(A,86,94) Inductor	VTL1133
L	5131	(A,88,94) Inductor	VTL1133
L	5132	(A,90,94) Inductor	VTL1133
L	5133	(A,91,94) Inductor	VTL1133
L	5134	(A,94,94) Inductor	VTL1133
L	5135	(A,100,94) Inductor	VTL1133
L	5136	(A,102,94) Inductor	VTL1133
L	5137	(A,103,94) Inductor	VTL1126
L	5138	(A,105,92) Inductor	CTF1386
L	5139	(A,108,93) Inductor	VTL1133
L	5140	(A,108,91) Inductor	CTF1547
L	5141	(A,85,94) Inductor	VTL1133
L	5142	(A,87,94) Inductor	VTL1133
L	5143	(A,89,94) Inductor	VTL1133
L	5144	(A,93,94) Inductor	VTL1133
L	5145	(A,96,94) Inductor	VTL1133
L	5146	(A,98,94) Inductor	VTL1133
L	5147	(A,101,94) Inductor	VTL1133
L	5148	(A,92,94) Inductor	VTL1133
L	5149	(A,95,94) Inductor	VTL1133
L	5150	(A,97,94) Inductor	VTL1133
L	5151	(A,99,94) Inductor	VTL1133
L	5152	(A,95,92) Inductor	CTF1306
L	5153	(A,99,92) Inductor	CTF1306
L	5154	(A,102,92) Inductor	CTF1306
L	5155	(A,89,92) Inductor	CTF1306
L	5156	(A,92,92) Inductor	CTF1306
L	5157	(A,83,92) Inductor	CTF1306
L	5158	(A,86,92) Inductor	CTF1306
L	5163	(A,88,51) Inductor	CTF1306
L	5165	(A,91,50) Inductor	LCTAW220J2520
L	5167	(A,111,66) Chip Bead	VTL1127
L	5170	(A,80,54) Inductor	CTF1635
L	5171	(A,114,94) Inductor	CTF1635
L	5172	(A,87,47) Inductor	CTF1635
L	5173	(A,113,58) Inductor	CTF1635
L	5174	(A,114,65) Inductor	CTF1635
L	5175	(A,115,89) Inductor	CTF1635
L	5201	(A,113,99) Inductor	CTF1306
L	5202	(A,62,84) Inductor	LCKAW101J2520

Circuit Symbol and No.			Part No.
L 5203	(A,78,89)	Inductor	LCKAW101J2520
L 5204	(A,76,92)	Inductor	CTF1306
L 5301	(A,122,110)	Inductor	CTF1306
L 5302	(A,73,95)	Inductor	DTL1096
L 5303	(A,111,109)	Inductor	CTF1306
L 5304	(A,75,97)	Inductor	DTL1096
L 5402	(A,73,61)	Inductor	CTF1473
L 5403	(A,62,55)	Inductor	CTF1473
L 5404	(A,58,65)	Inductor	VTL1127
T 5501	(B,70,10)	Transformer	CTT1130
TH4001	(A,56,100)	Thermistor	CCX1063
X 4001	(A,57,89)	Radiator 8.0 MHz	CSS1675
X 4301	(A,14,57)	Radiator 24.800 MHz	CSS1700
X 5101	(A,86,57)	Crystal Resonator 42 MHz	CSS1604
X 5401	(A,55,57)	Radiator 33.231 MHz	CSS1702
S 4501	(B,97,12)	Push Switch	CSG1155
S 4502	(B,110,12)	Push Switch	CSG1155
S 4503	(B,123,12)	Push Switch	CSG1155
VR5501	(A,76,24)	Semi-fixed 15 kΩ(B)	CCP1490
⚠FU5001	(A,135,57)	Fuse 750 mA	CEK1279
⚠FU5501	(A,87,38)	Fuse 1.75 A	CEK1283
FB4201	(A,36,35)	Inductor	CTF1639
FB4202	(A,29,29)	Inductor	CTF1639
FB4204	(A,40,32)	Inductor	CTF1639
FB4205	(A,40,23)	Inductor	CTF1639
FB4203	(A,29,26)	Inductor	CTF1639
FB4206	(A,29,23)	Inductor	CTF1639
FB5303	(A,67,95)	Inductor	CTF1635
FB5301	(A,79,92)	Inductor	CTF1635
FB5001	(A,143,94)	Inductor	CTF1635
FB5003	(A,137,96)	Inductor	CTF1635
FB5302	(A,113,104)	Inductor	CTF1635
FB5002	(A,125,56)	Inductor	CTF1635
EF4201	(A,50,36)	EMI Filter	DTL1106
EF4301	(A,52,47)	EMI Filter	DTL1106

RESISTORS

Circuit Symbol and No.		Part No.
R 4001	(A,55,75)	RS1/16SS473J
R 4002	(A,57,73)	RS1/16SS473J
R 4003	(A,55,74)	RS1/16SS473J
R 4004	(A,57,71)	RS1/16SS473J
R 4007	(A,53,73)	RS1/16SS471J
R 4008	(A,55,76)	RS1/16SS473J
R 4009	(A,58,79)	RS1/16SS471J
R 4010	(A,53,72)	RS1/16SS471J
R 4011	(A,55,72)	RS1/16SS470J
R 4012	(A,55,73)	RS1/16SS470J
R 4013	(A,53,75)	RS1/16SS470J
R 4014	(A,53,76)	RS1/16SS470J
R 4015	(A,53,74)	RS1/16SS470J
R 4017	(A,28,77)	RAB4CQ221J
R 4018	(A,56,80)	RS1/16SS470J
R 4019	(A,56,81)	RS1/16SS471J
R 4020	(A,58,80)	RS1/16SS470J
R 4021	(A,28,80)	RAB4CQ221J
R 4022	(A,56,82)	RS1/16SS471J
R 4023	(A,56,83)	RS1/16SS470J
R 4024	(A,58,82)	RS1/16SS470J
R 4025	(A,28,84)	RAB4CQ221J
R 4026	(A,56,85)	RS1/16SS221J
R 4027	(A,56,86)	RS1/16SS221J
R 4028	(A,28,87)	RAB4CQ221J
R 4029	(A,56,87)	RS1/16SS473J
R 4030	(A,58,86)	RS1/16SS220J
R 4031	(A,59,86)	RS1/16SS220J
R 4032	(A,29,91)	RAB4CQ221J
R 4033	(A,61,108)	RS1/16SS124J
R 4034	(A,28,94)	RAB4CQ221J
R 4035	(A,58,92)	RS1/16SS473J
R 4036	(A,58,93)	RS1/16SS473J
R 4037	(A,55,93)	RS1/16SS102J
R 4038	(A,28,97)	RS1/16SS151J
R 4039	(A,34,104)	RS1/16SS473J
R 4040	(A,53,102)	RS1/16SS102J
R 4041	(A,45,102)	RS1/16SS473J
R 4042	(A,42,102)	RS1/16SS473J
R 4043	(A,43,100)	RS1/16SS473J
R 4044	(A,31,101)	RS1/16SS221J
R 4045	(A,32,101)	RS1/16SS221J
R 4046	(A,34,101)	RS1/16SS471J
R 4047	(A,35,101)	RS1/16SS151J
R 4048	(A,36,101)	RS1/16SS151J
R 4049	(A,37,103)	RS1/16SS473J
R 4050	(A,57,96)	RS1/16SS473J
R 4053	(A,24,113)	RS1/16SS103J
R 4054	(A,39,100)	RS1/16SS101J
R 4055	(A,40,102)	RS1/16SS151J
R 4056	(A,40,100)	RS1/16SS471J
R 4057	(A,50,102)	RS1/16SS222J
R 4058	(A,41,102)	RS1/16SS473J
R 4060	(A,52,72)	RS1/16SS473J
R 4061	(A,52,102)	RS1/16SS222J
R 4062	(A,23,110)	RS1/16SS104J
R 4063	(A,36,103)	RS1/16SS473J
R 4064	(A,38,102)	RS1/16SS151J
R 4065	(A,39,102)	RS1/16SS151J
R 4066	(A,42,100)	RS1/16SS221J
R 4067	(A,49,102)	RS1/16SS473J
R 4068	(A,41,100)	RS1/16SS0R0J
R 4069	(A,35,103)	RS1/16SS473J
R 4070	(A,34,103)	RS1/16SS473J
R 4071	(A,58,98)	RS1/16SS124J
R 4072	(A,24,111)	RS1/16SS474J
R 4074	(A,56,84)	RS1/16SS221J
R 4075	(A,58,83)	RS1/16SS221J
R 4076	(A,58,81)	RS1/16SS102J
R 4077	(A,48,102)	RS1/16SS0R0J
R 4078	(A,43,102)	RS1/16SS101J
R 4079	(A,58,78)	RS1/16SS221J
R 4080	(A,50,71)	RS1/16SS473J
R 4083	(A,55,117)	RS1/16SS101J
R 4084	(A,53,117)	RS1/16SS101J
R 4085	(A,53,116)	RS1/16SS101J
R 4086	(A,56,117)	RS1/16SS104J
R 4087	(A,40,74)	RS1/16SS471J
R 4088	(A,52,74)	RS1/16SS0R0J
R 4089	(A,47,73)	RS1/16SS0R0J
R 4090	(A,48,73)	RS1/16SS0R0J
R 4091	(A,49,73)	RS1/16SS0R0J
R 4092	(A,44,102)	RS1/16SS102J

Circuit Symbol and No.		Part No.
R 4093	(A,49,106)	RS1/16SS473J
R 4094	(A,40,104)	RS1/16SS473J
R 4095	(A,59,84)	RS1/16SS473J
R 4096	(A,32,102)	RS1/16SS473J
R 4097	(A,60,81)	RS1/16SS222J
R 4098	(A,60,82)	RS1/16SS222J
R 4101	(A,12,97)	RAB4CQ221J
R 4102	(A,15,97)	RAB4CQ221J
R 4103	(A,20,97)	RAB4CQ221J
R 4104	(A,23,97)	RAB4CQ221J
R 4105	(A,18,99)	RS1/16SS473J
R 4106	(A,20,99)	RS1/16SS472J
R 4107	(A,18,72)	RS1/16SS102J
R 4201	(A,28,34)	RAB4CQ470J
R 4202	(A,42,34)	RAB4CQ470J
R 4203	(A,27,30)	RAB4CQ470J
R 4204	(A,42,31)	RAB4CQ470J
R 4205	(A,26,25)	RAB4CQ470J
R 4206	(A,42,25)	RAB4CQ470J
R 4207	(A,26,22)	RAB4CQ470J
R 4208	(A,42,22)	RAB4CQ470J
R 4301	(A,44,40)	RS1/16SS101J
R 4302	(A,48,43)	RAB4CQ101J
R 4303	(A,48,47)	RAB4CQ101J
R 4304	(A,48,50)	RAB4CQ101J
R 4305	(A,47,57)	RAB4CQ151J
R 4306	(A,52,66)	RAB4CQ151J
R 4307	(A,47,60)	RAB4CQ151J
R 4308	(A,52,63)	RAB4CQ151J
R 4309	(A,48,52)	RS1/16SS470J
R 4311	(A,52,53)	RS1/16SS473J
R 4312	(A,49,67)	RS1/16SS103J
R 4313	(A,51,56)	RS1/16SS103J
R 4314	(A,50,69)	RAB4CQ473J
R 4315	(A,45,72)	RAB4CQ473J
R 4316	(A,42,40)	RAB4CQ101J
R 4317	(A,42,72)	RAB4CQ473J
R 4318	(A,42,38)	RS1/16SS680J
R 4319	(A,42,37)	RS1/16SS470J
R 4320	(A,32,40)	RS1/16SS103J
R 4321	(A,39,72)	RAB4CQ473J
R 4322	(A,36,40)	RAB4CQ101J
R 4323	(A,36,38)	RAB4CQ560J
R 4324	(A,35,72)	RAB4CQ331J
R 4325	(A,32,72)	RAB4CQ331J
R 4326	(A,33,38)	RAB4CQ560J
R 4327	(A,29,72)	RAB4CQ331J
R 4328	(A,30,38)	RAB4CQ560J
R 4329	(A,26,72)	RAB4CQ331J
R 4330	(A,28,40)	RAB4CQ560J
R 4331	(A,27,38)	RAB4CQ560J
R 4332	(A,49,52)	RS1/16SS331J
R 4333	(A,30,74)	RS1/16SS473J
R 4334	(A,29,74)	RS1/16SS473J
R 4336	(A,25,40)	RAB4CQ560J
R 4337	(A,27,74)	RS1/16SS470J
R 4338	(A,22,40)	RAB4CQ560J
R 4339	(A,21,72)	RS1/16SS473J
R 4340	(A,22,72)	RS1/16SS473J
R 4341	(A,20,72)	RS1/16SS473J

Circuit Symbol and No.		Part No.
R 4342	(A,19,40)	RAB4CQ560J
R 4343	(A,19,72)	RS1/16SS473J
R 4345	(A,15,59)	RS1/16SS681J
R 4346	(A,13,59)	RS1/16SS105J
R 4347	(A,12,54)	RS1/16SS473J
R 4348	(A,12,47)	RAB4CQ473J
R 4349	(A,12,50)	RAB4CQ473J
R 4350	(A,12,52)	RS1/16SS472J
R 4351	(A,17,60)	RS1/16SS220J
R 4353	(A,12,53)	RS1/16SS0R0J
R 4354	(A,14,51)	RS1/16SS472J
R 4355	(A,15,51)	RS1/16SS472J
R 4357	(A,54,53)	RS1/16SS0R0J
R 4368	(A,16,63)	RS1/16SS102J
R 4369	(A,45,40)	RS1/16SS101J
R 4370	(A,17,58)	RS1/16SS0R0J
R 4371	(A,32,75)	RS1/16SS470J
R 4372	(A,49,62)	RS1/16SS181J
R 4433	(A,79,51)	RS1/16SS0R0J
R 4434	(A,72,55)	RS1/16SS0R0J
R 4437	(A,55,49)	RAB4CQ473J
R 4438	(A,55,46)	RAB4CQ473J
R 4440	(A,63,53)	RS1/16SS473J
R 4441	(A,58,51)	RS1/16SS473J
R 4442	(A,58,52)	RS1/16SS473J
R 4444	(A,73,38)	RS1/16SS0R0J
R 4501	(A,95,15)	RS1/16S472J
R 4502	(A,96,13)	RS1/16SS122J
R 4503	(A,119,15)	RS1/16SS122J
R 4504	(A,95,8)	RS1/16S182J
R 4505	(A,95,5)	RS1/16S182J
R 4506	(A,118,6)	RS1/16S182J
R 4507	(A,121,6)	RS1/16S102J
R 4526	(A,105,14)	RS1/16S472J
R 4527	(A,122,15)	RS1/16SS202J
R 4531	(A,123,5)	RS1/16SS151J
R 4532	(A,127,6)	RAB4CQ221J
R 4701	(A,39,113)	RS1/16SS102J
R 4702	(A,39,116)	RS1/16SS102J
R 4703	(A,48,111)	RS1/16SS105J
R 4704	(A,40,118)	RS1/16SS105J
R 4705	(A,50,117)	RS1/16SS103J
R 4706	(A,46,118)	RS1/16SS103J
R 4707	(A,46,119)	RS1/16SS103J
R 4708	(A,48,117)	RS1/16SS103J
R 4802	(A,127,117)	RS1/16SS0R0J
R 4803	(A,127,118)	RS1/16SS0R0J
R 4804	(A,129,120)	RS1/16SS0R0J
R 4805	(A,127,116)	RS1/16SS0R0J
R 4806	(A,143,113)	RS1/16S0R0J
R 4807	(A,139,112)	RS1/16SS102J
R 4808	(A,125,101)	RS1/16SS0R0J
R 4809	(A,134,107)	RS1/16SS0R0J
R 4810	(A,127,101)	RS1/16SS0R0J
R 4811	(A,128,101)	RS1/16SS0R0J
R 4816	(A,133,102)	RS1/16SS0R0J
R 4817	(A,129,101)	RS1/16SS0R0J
R 5001	(A,56,113)	RS1/16SS102J
R 5002	(A,142,52)	RS1/16SS474J
R 5003	(A,123,97)	RS1/16SS684J

Circuit Symbol and No.		Part No.
R 5004	(A,134,32)	RS1/16SS1001D
R 5006	(A,134,33)	RS1/16SS1101D
R 5007	(A,132,32)	RS1/16SS470J
R 5009	(A,147,90)	RS1/16S0R0J
R 5010	(A,147,89)	RS1/16S6801F
R 5011	(A,150,78)	RS1/16S0R0J
R 5012	(A,147,87)	RS1/16S201J
R 5013	(A,149,80)	RS1/16S1001D
R 5014	(A,147,86)	RS1/16S1001D
R 5015	(A,147,84)	RS1/16S682J
R 5016	(A,144,90)	RS1/16S5100F
R 5017	(A,147,77)	RS1/16S102J
R 5018	(A,148,75)	RS1/16S1600D
R 5019	(A,144,88)	RS1/16S2001F
R 5020	(A,142,34)	RS1/16S102J
R 5022	(A,147,75)	RS1/16S2700D
R 5023	(A,144,83)	RS1/16S684J
R 5024	(A,144,82)	RS1/16S123J
R 5025	(A,144,77)	RS1/16S333J
R 5026	(A,148,38)	RS1/16S1503D
R 5027	(A,149,36)	RS1/16S0R0J
R 5028	(A,147,35)	RS1/16S9102D
R 5029	(A,145,35)	RS1/16S0R0J
R 5030	(A,141,75)	RS1/16SS273J
R 5031	(A,141,73)	RS1/16S150J
R 5032	(A,134,73)	RS1/16S150J
R 5033	(A,134,74)	RS1/16SS563J
R 5034	(A,129,82)	RS1/16S5102D
R 5035	(A,140,92)	RS1/16S1002F
R 5036	(A,136,90)	RS1/16S1802F
R 5037	(A,120,83)	RS1/16S4300D
R 5038	(A,135,92)	RS1/16S2202F
R 5039	(A,135,94)	RS1/16S0R0J
R 5040	(A,123,83)	RS1/16S1802F
R 5041	(A,126,82)	RS1/16S3303D
R 5042	(A,123,82)	RS1/16S0R0J
R 5043	(A,120,80)	RS1/16S203J
R 5044	(A,129,88)	RS1/16SS470J
R 5045	(A,129,90)	RS1/16SS470J
R 5103	(A,96,53)	RS1/16SS0R0J
R 5107	(A,87,61)	RS1/16SS391J
R 5108	(A,86,61)	RS1/16SS105J
R 5109	(A,89,54)	RS1/16SS331J
R 5110	(A,91,57)	RS1/16SS152J
R 5111	(A,79,62)	RS1/16SS470J
R 5112	(A,72,69)	RS1/16SS473J
R 5113	(A,76,65)	RS1/16SS0R0J
R 5114	(A,123,74)	RS1/16S0R0J
R 5117	(A,76,64)	RS1/16SS0R0J
R 5118	(A,105,95)	RS1/16SS680J
R 5119	(A,74,65)	RS1/16SS473J
R 5120	(A,74,66)	RS1/16SS473J
R 5121	(A,74,67)	RS1/16SS473J
R 5124	(A,114,70)	RS1/16SS0R0J
R 5125	(A,114,76)	RS1/16SS333J
R 5126	(A,72,70)	RS1/16SS473J
R 5127	(A,72,72)	RS1/16SS473J
R 5128	(A,72,73)	RS1/16SS473J
R 5129	(A,72,74)	RS1/16SS473J
R 5130	(A,86,96)	RAB4CQ151J
R 5131	(A,89,96)	RAB4CQ151J
R 5132	(A,92,96)	RAB4CQ151J
R 5133	(A,95,96)	RAB4CQ151J
R 5134	(A,98,96)	RAB4CQ151J
R 5135	(A,105,98)	RAB4CQ151J
R 5136	(A,108,97)	RAB4CQ151J
R 5145	(A,104,53)	RS1/16SS0R0J
R 5146	(A,108,55)	RS1/16SS0R0J
R 5147	(A,111,57)	RS1/16SS0R0J
R 5152	(A,99,57)	RS1/16SS105J
R 5153	(A,101,58)	RS1/16SS105J
R 5154	(A,102,58)	RS1/16SS105J
R 5155	(A,110,55)	RS1/16SS0R0J
R 5156	(A,108,62)	RS1/16SS0R0J
R 5157	(A,112,66)	RS1/16SS181J
R 5158	(A,98,46)	RS1/16SS0R0J
R 5201	(A,73,78)	RS1/16SS101J
R 5202	(A,115,96)	RS1/16SS681J
R 5203	(A,63,79)	RS1/16SS101J
R 5204	(A,71,90)	RS1/16SS472J
R 5205	(A,65,89)	RS1/16SS223J
R 5206	(A,69,90)	RS1/16SS5602F
R 5208	(A,66,85)	RS1/16SS3302D
R 5209	(A,67,90)	RS1/16SS101J
R 5210	(A,64,94)	RS1/16SS153J
R 5211	(A,61,97)	RS1/16SS103J
R 5212	(A,64,95)	RS1/16SS0R0J
R 5213	(A,62,97)	RS1/16SS0R0J
R 5214	(A,63,99)	RS1/16SS100J
R 5215	(A,64,99)	RS1/16SS100J
R 5304	(A,111,106)	RS1/16S82R0F
R 5305	(A,111,103)	RS1/16S56R0D
R 5306	(A,109,103)	RS1/16S1800D
R 5307	(A,109,106)	RS1/16S39R0D
R 5308	(A,109,109)	RS1/16S47R0D
R 5309	(A,108,109)	RS1/16S47R0D
R 5310	(A,106,109)	RS1/16S47R0D
R 5311	(A,105,109)	RS1/16S68R0D
R 5312	(A,103,109)	RS1/16S82R0F
R 5313	(A,105,113)	RS1/16S75R0D
R 5314	(A,106,113)	RS1/16S22R0D
R 5315	(A,108,113)	RS1/16S150J
R 5406	(A,57,58)	RS1/16SS821J
R 5407	(A,57,56)	RS1/16SS105J
R 5408	(A,71,59)	RS1/16SS470J
R 5409	(A,71,60)	RS1/16SS0R0J
R 5410	(A,60,60)	RS1/16SS220J
R 5411	(A,67,74)	RS1/16SS103J
R 5412	(A,71,66)	RS1/16SS222J
R 5414	(A,58,67)	RS1/16SS151J
R 5415	(A,58,66)	RS1/16SS151J
R 5417	(A,66,61)	RS1/16SS0R0J
R 5419	(A,57,64)	RS1/16SS221J
R 5420	(A,64,60)	RS1/16SS0R0J
R 5421	(A,62,74)	RS1/16SS0R0J
R 5422	(A,63,74)	RS1/16SS0R0J
R 5423	(A,70,62)	RS1/16SS0R0J
R 5501	(A,63,22)	RS1/16SS103J
R 5502	(A,64,23)	RS1/16SS104J
R 5503	(A,67,23)	RS1/16SS473J

Circuit Symbol and No.			Part No.
R 5504	(A,68,23)		RS1/16SS105J
R 5505	(A,64,20)		RS1/16SS472J
R 5506	(A,66,18)		RS1/16SS473J
R 5507	(A,63,16)		RS1/16SS333J
R 5508	(A,66,14)		RS1/16S513J
R 5509	(A,67,27)		RS1/16SS103J
R 5510	(A,62,14)		RS1/16S105J
R 5511	(A,73,25)		RS1/16SS102J
R 5512	(A,78,23)		RS1/16SS563J
R 5513	(A,81,11)		RS1/16S103J
R 5514	(A,80,20)		RS1/16S103J
R 5515	(A,47,19)		RS1/16SS103J
R 5516	(A,49,18)		RS1/16SS104J
R 5518	(A,44,12)		RS1/16S621J
R 5520	(A,49,17)		RS1/16SS473J
R 5521	(A,43,12)		RS1/16S621J
R 5522	(A,44,18)		RS1/16S101J
R 5523	(A,43,18)		RS1/16S101J
R 5524	(A,41,12)		RS1/16S821J
R 5526	(A,59,14)		RS1/16S471J
R 5601	(A,105,46)		RS1/16SS0R0J
R 5602	(A,106,46)		RS1/16SS0R0J
R 5603	(A,107,46)		RS1/16SS0R0J
R 5604	(A,108,46)		RS1/16SS0R0J
R 5605	(A,109,46)		RS1/16SS0R0J
R 5606	(A,110,46)		RS1/16SS0R0J
R 5607	(A,111,46)		RS1/16SS0R0J
R 5608	(A,112,46)		RS1/16SS0R0J
R 5609	(A,113,46)		RS1/16SS0R0J

CAPACITORS

C 4001	(A,46,74)		CKSSYB104K10
C 4003	(A,43,107)		CKSSYB104K10
C 4004	(A,37,74)		CKSSYB104K10
C 4005	(A,43,105)	10 µF	CCG1171
C 4006	(A,55,78)		CKSSYB104K10
C 4007	(A,28,82)		CKSSYB104K10
C 4008	(A,55,89)		CKSSYB104K10
C 4009	(A,26,88)		CKSSYB104K10
C 4010	(A,55,91)		CKSSYB104K10
C 4011	(A,59,111)		CKSRYB105K6R3
C 4012	(A,28,96)		CKSSYB104K10
C 4013	(A,55,96)		CKSSYB104K10
C 4014	(A,54,102)		CKSSYB104K10
C 4015	(A,37,100)		CKSSYB104K10
C 4016	(A,51,102)		CKSSYB104K10
C 4018	(A,46,100)		CKSSYB104K10
C 4020	(A,21,110)		CKSSYB103K16
C 4021	(A,58,115)		CKSSYB104K10
C 4022	(A,52,100)		CKSSYB104K10
C 4023	(A,31,98)		CCSSCH680J50
C 4101	(A,18,97)		CKSSYB102K50
C 4102	(A,18,98)		CKSSYB104K10
C 4103	(A,24,104)		CSZSR470M10
C 4106	(A,23,102)		CKSRYB105K6R3
C 4201	(A,40,35)		CCSSCH560J50
C 4202	(A,47,34)		CSZSC101M10
C 4203	(A,34,35)		CKSSYB104K10
C 4204	(A,28,30)		CKSSYB104K10
C 4205	(A,39,30)		CKSSYB104K10

Circuit Symbol and No.			Part No.
C 4206	(A,28,25)		CKSSYB104K10
C 4207	(A,39,25)		CKSSYB104K10
C 4208	(A,29,22)		CKSSYB104K10
C 4209	(A,44,35)		CCSSCH101J50
C 4210	(A,40,30)		CKSSYB102K50
C 4211	(A,29,30)		CKSSYB102K50
C 4212	(A,29,25)		CKSSYB102K50
C 4213	(A,28,22)		CKSSYB102K50
C 4214	(A,40,25)		CKSSYB102K50
C 4215	(A,34,36)		CKSSYB102K50
C 4216	(A,43,37)		CCSSCH101J50
C 4301	(A,48,67)		CKSSYB102K50
C 4302	(A,47,67)		CKSSYB104K10
C 4303	(A,49,54)		CKSSYB102K50
C 4304	(A,47,55)		CKSSYB104K10
C 4305	(A,48,64)		CKSSYB104K10
C 4306	(A,50,54)		CKSSYB104K10
C 4307	(A,47,64)		CKSSYB102K50
C 4308	(A,51,44)		CSZSR470M6R3
C 4309	(A,33,40)		CKSSYB104K10
C 4310	(A,34,40)		CKSSYB102K50
C 4311	(A,51,49)	10 µF	CCG1171
C 4312	(A,30,40)		CKSSYB102K50
C 4313	(A,31,40)		CKSSYB104K10
C 4314	(A,24,72)		CKSSYB102K50
C 4315	(A,23,72)		CKSSYB104K10
C 4316	(A,17,46)		CKSSYB104K10
C 4317	(A,16,46)		CKSSYB102K50
C 4318	(A,14,63)		CKSSYB104K10
C 4319	(A,13,58)		CCSSCH100D50
C 4320	(A,17,55)		CKSSYB104K10
C 4321	(A,15,58)		CCSSCH100D50
C 4322	(A,17,48)		CKSSYB104K10
C 4323	(A,17,62)		CCSSCH101J50
C 4324	(A,15,66)		CKSSYB102K50
C 4325	(A,16,48)		CKSSYB103K16
C 4326	(A,16,66)		CKSSYB104K10
C 4328	(A,16,54)	10 µF	CCG1171
C 4329	(A,55,53)		CKSSYB104K10
C 4335	(A,16,68)		CCSSCH101J50
C 4336	(A,14,53)		CCSSCH101J50
C 4337	(A,13,48)		CCSSCH101J50
C 4701	(A,39,114)		CKSSYB473K10
C 4702	(A,39,115)		CKSSYB473K10
C 4703	(A,48,112)		CKSSYB102K50
C 4704	(A,41,118)		CKSSYB102K50
C 4705	(A,50,115)		CKSSYB104K10
C 4706	(A,39,108)		CKSSYB102K50
C 4707	(A,41,108)		CKSSYB102K50
C 4708	(A,43,108)		CKSSYB102K50
C 4709	(A,45,108)		CKSSYB102K50
C 4710	(A,51,117)		CKSRYB105K10
C 5001	(A,132,53)	10 µF	CCG1171
C 5002	(A,120,88)	10 µF	CCG1171
C 5003	(A,54,105)		CSZSC470M10
C 5004	(A,58,109)		CKSRYB103K50
C 5005	(A,137,33)		CKSRYB104K25
C 5006	(A,140,50)		CKSRYB104K25
C 5008	(A,123,95)		CKSRYB104K25
C 5009	(A,136,30)		CSZSR101M6R3

Circuit Symbol and No.				Part No.
C	5010	(A,140,54)		CKSQYB105K16
C	5011	(A,120,95)		CKSRYB105K10
C	5012	(A,131,32)		CKSRYB105K6R3
C	5013	(A,142,55)		CSZS100M16
C	5014	(A,129,32)		CKSRYB105K6R3
C	5015	(A,54,113)		CKSRYB105K6R3
C	5016	(A,144,57)		CKSRYB105K10
C	5017	(A,146,94)		CKSRYB104K25
C	5018	(A,147,83)		CKSRYB473K50
C	5019	(A,142,60)	68 µF/6.3 V	CCH1440
C	5020	(A,147,78)		CCSRCH331J50
C	5021	(A,143,63)		CKSRYB104K25
C	5022	(A,144,86)		CKSRYB104K25
C	5023	(A,150,44)		CSZSC101M10
C	5024	(A,144,92)		CSZS100M16
C	5025	(A,147,81)		CKSRYB103K50
C	5026	(A,144,79)		CCSRCH101J50
C	5027	(A,144,76)		CKSRYB103K50
C	5028	(A,144,85)		CKSRYB393K16
C	5029	(A,144,80)		CKSRYB393K16
C	5030	(A,143,36)		CKSRYB104K25
C	5031	(A,141,76)		CKSRYB104K25
C	5032	(A,130,70)		CKSRYB103K50
C	5034	(A,139,90)		CKSRYB393K16
C	5035	(A,135,69)	10 µF	CCG1223
C	5036	(A,136,65)		CKSRYB224K16
C	5037	(A,132,69)	10 µF	CCG1223
C	5038	(A,139,75)		CKSRYB105K6R3
C	5039	(A,137,75)		CKSRYB102K50
C	5041	(A,141,69)	10 µF	CCG1223
C	5042	(A,144,70)		CKSRYB103K50
C	5043	(A,137,90)		CKSRYB102K50
C	5044	(A,134,76)		CKSRYB104K25
C	5045	(A,141,90)		CKSRYB105K6R3
C	5046	(A,132,75)		CKSRYB105K6R3
C	5047	(A,131,75)		CKSRYB103K50
C	5048	(A,128,86)		CKSYB475K16
C	5049	(A,131,89)		CKSRYB104K25
C	5050	(A,128,92)		CKSRYB104K25
C	5051	(A,130,92)		CKSRYB104K25
C	5052	(A,127,92)		CKSRYB104K25
C	5053	(A,123,59)		CKSRYB104K25
C	5054	(A,129,80)		CKSRYB472K50
C	5055	(A,129,79)		CKSRYB472K50
C	5056	(A,129,84)		CKSRYB103K50
C	5057	(A,124,62)	33 µF/10 V	CCH1586
C	5058	(A,122,56)		CKSQYB105K16
C	5059	(A,130,97)		CKSQYB105K16
C	5060	(A,123,80)		CKSRYB104K25
C	5062	(A,126,97)		CKSQYB105K16
C	5063	(A,123,76)		CKSQYF105Z25
C	5064	(A,133,96)		CKSQYF225Z16
C	5065	(A,135,96)		CKSQYF225Z16
C	5066	(A,129,77)		CKSRYB105K10
C	5067	(A,132,89)		CKSRYB105K10
C	5068	(A,136,99)		CKSQYB105K16
C	5069	(A,120,77)		CKSQYF105Z25
C	5101	(A,85,59)		CCSSCH8R0D50
C	5102	(A,93,53)	10 µF	CCG1171
C	5103	(A,87,59)		CCSSCH8R0D50
C	5105	(A,99,55)		CKSRYB474K10
C	5107	(A,126,47)		CKSSYB102K50
C	5108	(A,89,53)		CKSSYB104K10
C	5109	(A,98,56)		CKSRYB474K10
C	5110	(A,101,55)		CKSRYB474K10
C	5111	(A,90,59)		CKSSYB103K16
C	5112	(A,92,56)		CCSSCH4R0C50
C	5113	(A,94,61)		CKSSYB104K10
C	5114	(A,91,59)		CCSSCH181J25
C	5115	(A,92,59)		CKSSYB104K10
C	5116	(A,93,59)		CKSSYB104K10
C	5117	(A,94,59)		CKSSYB104K10
C	5118	(A,96,56)		CKSRYB474K10
C	5119	(A,96,59)		CKSSYB104K10
C	5120	(A,97,59)		CKSSYB104K10
C	5121	(A,98,59)		CKSSYB104K10
C	5122	(A,103,59)		CKSSYB104K10
C	5123	(A,104,59)		CKSSYB104K10
C	5124	(A,105,60)		CKSSYB104K10
C	5125	(A,82,61)		CKSSYB104K10
C	5126	(A,84,61)		CKSSYB104K10
C	5127	(A,85,61)		CKSSYB104K10
C	5128	(A,89,61)		CKSSYB104K10
C	5129	(A,96,61)		CKSSYB104K10
C	5130	(A,99,61)		CKSSYB104K10
C	5131	(A,102,61)		CKSSYB104K10
C	5132	(A,104,61)		CKSSYB104K10
C	5133	(A,100,60)		CKSSYB104K10
C	5134	(A,101,60)		CKSSYB104K10
C	5135	(A,102,60)		CKSSYB104K10
C	5136	(A,79,65)		CKSSYB104K10
C	5137	(A,109,65)		CKSSYB104K10
C	5139	(A,109,67)		CKSSYB104K10
C	5140	(A,79,68)		CKSSYB104K10
C	5141	(A,109,69)		CKSSYB104K10
C	5142	(A,79,71)		CKSSYB104K10
C	5143	(A,109,72)		CKSSYB104K10
C	5144	(A,110,77)		CCSSCH101J50
C	5145	(A,79,74)		CKSSYB104K10
C	5146	(A,112,77)		CKSSYB104K10
C	5147	(A,109,76)		CKSSYB104K10
C	5148	(A,79,77)		CKSSYB104K10
C	5149	(A,109,78)		CKSSYB104K10
C	5150	(A,109,80)		CKSSYB104K10
C	5151	(A,79,80)		CKSSYB104K10
C	5152	(A,79,83)		CKSSYB104K10
C	5153	(A,109,82)		CKSSYB104K10
C	5154	(A,109,84)		CKSSYB104K10
C	5155	(A,109,85)		CKSSYB104K10
C	5156	(A,109,86)		CKSSYB104K10
C	5157	(A,79,86)		CKSSYB104K10
C	5158	(A,109,89)		CKSSYB104K10
C	5159	(A,84,91)		CKSSYB104K10
C	5160	(A,88,91)		CKSSYB104K10
C	5161	(A,90,91)		CKSSYB104K10
C	5162	(A,92,91)		CKSSYB104K10
C	5163	(A,95,91)		CKSSYB104K10
C	5164	(A,102,91)		CKSSYB104K10
C	5165	(A,82,91)		CKSSYB104K10
C	5166	(A,99,91)		CKSSYB104K10

Circuit Symbol and No.		Part No.
C 5167	(A,115,85) 10 μF	CCG1171
C 5168	(A,114,79)	CSZSR470M10
C 5179	(A,113,61)	CSZSR470M10
C 5180	(A,91,61)	CKSSYB104K10
C 5181	(A,110,94) 10 μF	CCG1171
C 5182	(A,110,92) 10 μF	CCG1171
C 5183	(A,115,68)	CKSRYB105K10
C 5184	(A,113,91)	CKSSYB103K16
C 5185	(A,113,86)	CKSSYB103K16
C 5186	(A,114,68)	CKSSYB103K16
C 5187	(A,79,57)	CKSSYB103K16
C 5188	(A,80,56)	CKSRYB105K10
C 5189	(A,87,49)	CKSRYB105K10
C 5190	(A,87,50)	CKSSYB103K16
C 5191	(A,115,82)	CKSSYB103K16
C 5197	(A,105,57)	CKSSYB471K50
C 5198	(A,124,46)	CCSSCH101J50
C 5199	(A,125,46)	CKSSYB102K50
C 5201	(A,61,80) 10 μF	CCG1171
C 5204	(A,113,98)	CKSSYB104K10
C 5205	(A,66,75)	CKSSYB104K10
C 5206	(A,70,92)	CKSRYB105K6R3
C 5207	(A,74,92)	CKSSYB104K10
C 5208	(A,71,85)	CKSSYB104K10
C 5209	(A,66,87)	CKSSYB104K10
C 5210	(A,74,86)	CSZSR220M16
C 5211	(A,62,87) 4.7 μF	CCG1111
C 5212	(A,66,89)	CKSSYB104K10
C 5213	(A,66,82)	CKSRYB105K6R3
C 5214	(A,60,78)	CKSSYB104K10
C 5301	(A,119,102)	CKSRYB104K25
C 5302	(A,82,94)	CKSSYB104K10
C 5303	(A,116,103) 10 μF	CCG1192
C 5304	(A,70,94)	CKSRYB104K25
C 5305	(A,67,93)	CKSRYB104K25
C 5306	(A,81,96)	CSZSR330M10
C 5307	(A,115,104)	CKSSYB104K10
C 5308	(A,81,100)	CKSSYB104K10
C 5309	(A,71,98) 4.7 μF	CCG1111
C 5310	(A,76,94)	CKSSYB104K10
C 5311	(A,70,95)	CKSRYB104K25
C 5312	(A,67,97)	CKSQYF105Z25
C 5313	(A,66,99)	CKSRYB104K25
C 5314	(A,78,96) 10 μF	CCG1171
C 5315	(A,78,99)	CKSSYB104K10
C 5404	(A,62,56)	CKSSYB104K10
C 5406	(A,72,62) 10 μF	CCG1171
C 5407	(A,69,62)	CKSSYB104K10
C 5408	(A,56,56)	CCSSCH8R0D50
C 5409	(A,56,58)	CCSSCH8R0D50
C 5410	(A,61,61)	CCSSCH5R0C50
C 5411	(A,65,74)	CKSSYB104K10
C 5412	(A,59,73)	CKSSYB104K10
C 5417	(A,61,58)	CCSSCH680J50
C 5418	(A,63,61)	CCSSCH680J50
C 5419	(A,68,62)	CCSSCH680J50
C 5420	(A,65,73)	CCSSCH680J50
C 5421	(A,59,72)	CCSSCH680J50
C 5501	(A,85,31) 10 μF	CCG1223
C 5502	(A,85,35) 10 μF	CCG1223
C 5504	(A,77,31)	CKSRYB104K25
C 5505	(A,74,31)	CKSRYB105K10
C 5506	(A,69,23)	CKSRYB104K25
C 5507	(A,66,16)	CKSRYB104K25
C 5508	(A,71,23)	CKSRYB105K10
C 5509	(A,68,19)	CKSRYB474K10
C 5511	(A,68,17)	CKSRYB105K10
C 5512	(A,69,14)	CKSRYB332K50
C 5513	(A,67,14)	CKSRYB152K50
C 5514	(A,70,28)	CKSRYB104K25
C 5515	(A,78,16)	CKSRYB473K50
C 5516	(A,61,14)	CKSRYB103K50
C 5517	(A,75,26)	CCSRCH221J50
C 5518	(A,78,19)	CKSRYB473K50
C 5519	(A,85,26) 10 μF	CCG1223
C 5520	(A,83,18) 4.7 μF	CCG1111
C 5522	(A,91,6)	CKSRYB105K10
C 5523	(A,93,6)	CKSRYB105K10
C 5525	(A,45,15)	CKSRYB104K25
C 5526	(B,49,8) 22 pF	CCG1140
C 5527	(A,49,14)	CKSRYB223K50
C 5529	(A,87,10) 4.7 μF	CCG1111

H

Unit Number : CXX2316
Unit Name : Main PCB Unit(Service)

MISCELLANEOUS

IC 101	Regulator	BA00CC0WFP
IC 102	IC	BA6247FP
IC 103	Photo-interrupter	GP2L24B
IC 104	IC	TC7W14FU
IC 105	Photo-interrupter	GP2L24B
Q 101	Chip Transistor	DTC124EUA
D 101	Diode	UDZS5R6(B)

RESISTORS

R 101	RS1/16S102J
R 102	RS1/16S3302D
R 103	RS1/16S3900D
R 104	RS1/16S4701D
R 105	RS1/16S471J
R 106	RS1/16S102J
R 107	RS1/16S102J
R 108	RS1/16S102J
R 109	RS1/16S102J
R 110	RS1/16S102J
R 111	RS1/16S562J
R 112	RS1/16S102J
R 113	RS1/16S102J
R 114	RS1/16S102J
R 115	RS1/16S562J
R 116	RS1/16S102J
R 117	RS1/16S472J

CAPACITORS

C 101	CKSYB475K16

Circuit Symbol and No.			Part No.
C 102			CKSYB475K16
C 103			CKSRYB104K16
C 104			CKSRYB104K16
C 105			CKSRYB223K16
C 106			CKSRYB104K16
C 107			CKSRYB223K16
C 108			CEVW101M16
C 109			CKSRYB104K16
C 110			CCSRCH102J50
C 111			CCSRCH102J50

I

Unit Number : CZW5029
Unit Name : Switch PCB Unit

S 101	Switch(Angle)	CSN1068

J

Unit Number : CZW5028
Unit Name : Volume PCB Unit

VR101	Volume(Angle sence)	CCW1025

K

Unit Number : CWN2489
Unit Name : Power Supply Unit

MISCELLANEOUS

Circuit Symbol and No.			Part No.
IC 7601	(A,34,33)	IC	BP5451-1
IC 7701	(A,34,9)	IC	BP5451-1
IC 7751	(B,25,54)	IC	BA00DD0WHFP
IC 7801	(B,32,67)	IC	S-812C54AUA-C3I
IC 7851	(A,10,88)	IC	BA00CC0WFP
Q 7601	(A,28,42)	Transistor	2SJ529S
Q 7602	(A,38,42)	Transistor	2SJ529S
Q 7701	(A,28,17)	Transistor	2SJ529S
Q 7702	(A,38,17)	Transistor	2SJ529S
Q 7751	(B,12,74)	Transistor	2SC4081
Q 7801	(B,23,70)	Transistor	2SB1184F5
Q 7802	(B,44,54)	Transistor	2SD1664
Q 7901	(B,40,73)	Transistor	2SD1760F5
Q 7902	(B,33,81)	Transistor	IMD2A
D 7501	(B,62,86)	Diode	1SR154-400
D 7502	(B,66,86)	Diode	1SR154-400
D 7551	(B,12,69)	Diode	UDZS5R6(B)
D 7552	(B,12,62)	Diode	UDZS5R6(B)
D 7553	(A,10,71)	Diode	UDZS5R6(B)
D 7554	(A,10,69)	Diode	UDZS5R6(B)
D 7555	(B,15,62)	Diode	UDZS5R6(B)
D 7601	(B,30,40)	Diode	RSX201L-30
D 7602	(B,26,40)	Diode	RSX201L-30
D 7603	(B,39,40)	Diode	RSX201L-30
D 7604	(B,64,50)	Diode	RSX201L-30
D 7605	(B,68,50)	Diode	RSX201L-30
D 7701	(B,29,15)	Diode	RSX201L-30
D 7702	(B,38,15)	Diode	RSX201L-30
D 7704	(B,66,27)	Diode	RSX201L-30
D 7705	(B,70,27)	Diode	RSX201L-30
D 7751	(B,14,49)	Diode	RSX201L-30
D 7801	(B,50,54)	Diode	UDZS18(B)
D 7802	(B,39,55)	Diode	1SR154-400
D 7901	(B,30,76)	Diode	UDZS5R1(B)
D 7902	(B,46,67)	Diode	RSX201L-30
D 7903	(A,16,77)	Diode	RSX201L-30
L 7501	(A,39,81)	Coil	CTH1113
L 7551	(A,18,51)	Inductor	CTF1488
L 7552	(A,8,51)	Inductor	CTF1488
L 7553	(A,14,51)	Inductor	CTF1488
L 7554	(A,10,53)	Inductor	CTF1558
L 7555	(A,24,69)	Inductor	CTF1558
L 7601	(A,20,42)	Coil	CTH1303
L 7602	(A,49,42)	Coil	CTH1303
L 7603	(A,69,45)	Coil	CTH1295
L 7701	(A,20,18)	Coil	CTH1303
L 7702	(A,49,18)	Coil	CTH1303
L 7703	(A,69,19)	Coil	CTH1295
⚠FU7601	(A,65,52)	Fuse 4 A	CEK1288
⚠FU7602	(A,12,50)	Fuse 3.5 A	CEK1287
⚠FU7603	(A,34,53)	Fuse 2 A	CEK1284
⚠FU7701	(A,68,24)	Fuse 3 A	CEK1286
⚠FU7702	(A,12,26)	Fuse 2 A	CEK1284
⚠FU7703	(A,39,25)	Fuse 2 A	CEK1284
⚠FU7801	(A,17,70)	Fuse 0.5 A	CEK1278
⚠FU7901	(A,15,72)	Fuse 0.5 A	CEK1278
EF7551	(A,14,55)	EMI Filter	DTF1106
EF7552	(A,8,55)	EMI Filter	DTF1106
EF7553	(A,10,55)	EMI Filter	DTL1106
EF7554	(A,18,55)	EMI Filter	DTL1106
EF7555	(A,21,69)	EMI Filter	DTL1106

RESISTORS

Circuit Symbol and No.		Part No.
R 7553	(B,15,71)	RS1/16S103J
R 7554	(B,12,71)	RS1/16S103J
R 7555	(B,15,75)	RS1/16S103J
R 7558	(A,26,90)	RS1/16S0R0J
R 7601	(A,31,49)	RS1/16S102J
R 7602	(A,16,35)	RS1/16S1801D
R 7603	(A,13,35)	RS1/16S1002D
R 7605	(A,23,35)	RS1/16S0R0J
R 7606	(A,50,35)	RS1/16S0R0J
R 7608	(A,57,35)	RS1/16S1202D
R 7609	(A,59,36)	RS1/16S68R0D
R 7701	(A,30,26)	RS1/16S102J
R 7702	(A,17,11)	RS1/16S2001D
R 7703	(A,14,11)	RS1/16S2702D
R 7705	(A,23,11)	RS1/16S0R0J
R 7706	(A,50,11)	RS1/16S0R0J
R 7707	(A,57,11)	RS1/16S1002D
R 7713	(A,54,11)	RS1/16S4701D
R 7752	(B,33,59)	RS1/16S1203D
R 7753	(B,33,58)	RS1/16S1802D
R 7754	(B,33,56)	RS1/16S4702D
R 7755	(B,33,54)	RS1/16S0R0J
R 7756	(B,17,51)	RS1/16S102J
R 7801	(B,36,64)	RS1/16S471J
R 7802	(A,32,58)	RS1/16S2R2J
R 7803	(A,35,58)	RS1/16S2R2J
R 7804	(A,32,56)	RS1/16S2R2J

Circuit Symbol and No.			Part No.
R 7805	(A,35,56)		RS1/16S2R2J
R 7806	(B,45,50)		RS1/16S222J
R 7851	(B,19,88)		RS1/16S223J
R 7852	(B,17,88)		RS1/16S274J
R 7853	(B,21,88)		RS1/16S473J
R 7854	(B,13,83)		RS1/16S102J
R 7901	(B,22,84)		RS1/16S102J
R 7902	(B,36,79)		RS1/16S681J
R 7903	(B,40,83)		RS1/16S681J
R 7904	(B,52,68)		RS1/16S2R2J
R 7905	(B,52,64)		RS1/16S2R2J
R 7906	(B,52,66)		RS1/16S2R2J
R 7907	(B,52,62)		RS1/16S2R2J

CAPACITORS

Circuit Symbol and No.			Part No.
C 7501	(A,63,68)	3 300 µF/16 V	CCH1583
C 7601	(A,10,42)		CEHAZL471M16
C 7602	(A,33,38)		CKSYB225K16
C 7603	(A,66,34)		CEHAZL471M16
C 7604	(A,43,38)		CKSYB225K16
C 7606	(A,59,42)		CEHAZL471M16
C 7607	(B,56,51)		CKSYB475K16
C 7608	(A,60,53)	2 200 µF/16 V	CCH1405
C 7701	(A,10,18)		CEHAZL471M16
C 7702	(A,33,14)		CKSYB225K16
C 7703	(A,68,9)		CEHAZL471M16
C 7704	(A,43,14)		CKSYB225K16
C 7706	(A,58,19)		CEHAZL471M16
C 7707	(B,70,16)		CKSYB475K16
C 7752	(B,33,61)		CKSRYB104K25
C 7753	(A,25,53)		CEVW221M10
C 7754	(B,24,61)		CKSRYB105K10
C 7801	(B,22,79)		CKSYB475K16
C 7802	(B,22,81)		CKSRYB102K50
C 7803	(A,22,76)		CEVW101M10
C 7804	(B,32,71)		CKSRYB103K50
C 7805	(B,29,66)		CKSRYB103K50
C 7807	(A,42,63)	2 200 µF/16 V	CCH1405
C 7808	(B,48,54)		CKSRYB104K25
C 7851	(A,14,84)		CKSRYB105K10
C 7852	(A,14,82)		CKSRYB104K50
C 7853	(A,20,87)		CEVW101M10
C 7854	(B,14,85)		CKSQYB105K16
C 7901	(A,17,81)	10 µF	CCG1171
C 7902	(B,33,76)		CKSRYB104K50
C 7903	(A,49,66)		CEAT102M16(P35)

L

Unit Number : CWN2493
Unit Name : Amp Unit

MISCELLANEOUS

Circuit Symbol and No.			Part No.
IC 9021	(A,23,109)	IC	AN8015SH
IC 9101	(A,21,28)	IC	OPA2134UA
IC 9102	(A,36,28)	IC	OPA2134UA
IC 9151	(A,36,38)	IC	OPA2134UA
IC 9171	(A,21,38)	IC	OPA2134UA
IC 9181	(A,55,28)	IC	OPA2134UA
IC 9202	(A,25,70)	IC	PM9009A
IC 9251	(A,25,51)	IC	PM9009A
IC 9321	(A,48,54)	IC	PAL007C
IC 9322	(A,48,116)	IC	PAL007C
Q 9001	(A,31,132)	Transistor	2SD1664
Q 9011	(B,76,134)	Transistor	UMF5N
Q 9012	(B,70,126)	Transistor	2SD1760F5
Q 9021	(A,32,124)		DTC124EUA
Q 9022	(A,27,126)	Transistor	2SA1797
Q 9023	(A,21,115)	Transistor	UMZ1N
Q 9024	(A,13,110)	Transistor	2SA1797
Q 9025	(A,30,104)	Transistor	DTC124EUA
Q 9051	(B,44,92)	Transistor	DTC124EUA
Q 9052	(B,44,96)	Transistor	2SA1576A
Q 9054	(B,38,89)	Transistor	DTA114EUA
Q 9055	(B,34,99)	Transistor	2SC4081
Q 9056	(A,22,139)	Transistor	2SC4081
Q 9061	(B,19,145)	Transistor	DTC124EUA
Q 9062	(B,24,145)	Transistor	DTC124EUA
Q 9441	(A,67,20)	Transistor	IMX9
Q 9442	(A,52,20)	Transistor	IMX9
Q 9443	(A,37,20)	Transistor	IMX9
Q 9444	(A,22,20)	Transistor	IMX9
Q 9445	(A,14,20)	Transistor	IMX9
Q 9446	(A,74,20)	Transistor	IMX9
Q 9447	(A,59,20)	Transistor	IMX9
Q 9448	(A,44,20)	Transistor	IMX9
Q 9449	(A,29,20)	Transistor	IMX9
Q 9451	(B,25,135)		DTA144EUA
D 9001	(A,25,132)	Diode	UDZS18(B)
D 9002	(A,47,157)	Diode	1SR154-400
D 9003	(A,43,157)	Diode	1SR154-400
D 9004	(A,43,164)	Diode	1SR154-400
D 9005	(A,47,164)	Diode	1SR154-400
D 9011	(B,78,129)	Diode	HZU6R8(B3)
D 9021	(A,12,104)	Diode	SC802-06
D 9051	(B,22,138)	Diode	DAN202U
D 9052	(B,33,85)	Diode	HZU7R5(B3)
D 9053	(B,29,136)	Diode	DAN202U
D 9202	(A,14,71)	Diode	RB751V-40
D 9251	(A,14,51)	Diode	RB751V-40
D 9451	(B,29,155)	Diode	DAN202U
D 9452	(B,21,155)	Diode	DAN202U
L 9021	(A,14,117)	Coil	CTH1267
L 9022	(A,17,104)	Coil	CTH1267
L 9023	(A,14,86)	Coil	CTH1267
L 9024	(A,9,82)	Inductor	CTF1379
L 9025	(A,18,112)	Chip Coil	LCTAW15NJ2520
L 9202	(B,11,73)	Inductor	LCYC2R2K2125
L 9251	(B,11,59)	Inductor	LCYC2R2K2125
L 9401	(B,74,17)	Inductor	CTF1473
L 9402	(B,67,17)	Inductor	CTF1473
L 9403	(B,60,17)	Inductor	CTF1473
L 9404	(B,52,17)	Inductor	CTF1473
L 9405	(B,46,17)	Inductor	CTF1473
L 9406	(B,39,17)	Inductor	CTF1473
L 9407	(B,32,17)	Inductor	CTF1473
L 9408	(B,24,17)	Inductor	CTF1473
L 9441	(B,17,17)	Inductor	CTF1473
L 9442	(A,80,21)	Inductor	CTF1487

Circuit Symbol and No.		Part No.
L 9451	(A,11,129) Inductor	CTF1379
VR9021	(A,26,101) Semi-fixed 10 kΩ(B)	CCP1396
⚠FU9011	(A,72,141) Fuse 1.5 A	CEK1282
⚠FU9012	(A,72,29) Fuse 1.5 A	CEK1282
⚠FU9021	(A,9,85) Fuse 0.5 A	CEK1278
⚠FU9441	(A,80,27) Fuse 3 A	CEK1286
⚠FU9451	(A,45,169) Fuse 3 A	CEK1286

RESISTORS

Circuit Symbol and No.		Part No.
R 9001	(A,28,133)	RS1/16S471J
R 9011	(B,71,135)	RS1/16S103J
R 9012	(B,73,137)	RS1/16S103J
R 9013	(B,72,132)	RS1/16S181J
R 9014	(B,70,132)	RS1/16S181J
R 9015	(B,69,132)	RS1/16S181J
R 9021	(A,34,127)	RS1/16S223J
R 9022	(A,31,127)	RAB4C332J
R 9023	(A,17,110)	RS1/16S8201D
R 9024	(A,18,110)	RS1/16S3302D
R 9025	(B,22,102)	RS1/16S1803D
R 9026	(B,22,100)	RS1/16S1001D
R 9027	(A,23,106)	RS1/16S103J
R 9028	(A,26,105)	RS1/16S3601D
R 9029	(B,22,106)	RS1/10S681J
R 9030	(B,28,107)	RS1/16S4702D
R 9031	(B,27,107)	RS1/16S5101D
R 9032	(B,26,114)	RS1/16S223J
R 9033	(B,22,109)	RS1/10S222J
R 9034	(A,27,113)	RS1/10S101J
R 9035	(B,22,112)	RS1/10S222J
R 9037	(B,25,123)	RS1/16S0R0J
R 9039	(B,25,87)	RS1/16S0R0J
R 9051	(B,40,97)	RS1/16S473J
R 9052	(A,22,135)	RS1/16S104J
R 9053	(A,21,132)	RS1/16S473J
R 9054	(B,40,95)	RS1/16S223J
R 9055	(B,47,95)	RS1/16S102J
R 9058	(B,26,132)	RS1/16S472J
R 9059	(B,34,91)	RS1/16S473J
R 9060	(B,33,95)	RS1/16S104J
R 9061	(B,17,139)	RS1/16S103J
R 9062	(B,18,142)	RS1/16S103J
R 9063	(B,18,148)	RS1/16S331J
R 9064	(B,26,148)	RS1/16S101J
R 9101	(B,15,29)	RS1/16S222J
R 9102	(B,31,30)	RS1/16S222J
R 9103	(B,18,29)	RS1/16S222J
R 9104	(B,33,32)	RS1/16S222J
R 9105	(B,24,34)	RS1/16S222J
R 9106	(B,38,31)	RS1/16S222J
R 9107	(B,25,30)	RS1/16S222J
R 9108	(B,41,30)	RS1/16S222J
R 9109	(B,20,27)	RS1/16S682J
R 9110	(B,34,27)	RS1/16S682J
R 9111	(B,22,27)	RS1/16S682J
R 9112	(B,38,27)	RS1/16S682J
R 9113	(B,25,28)	RS1/16S682J
R 9114	(B,41,28)	RS1/16S682J
R 9115	(B,15,28)	RS1/16S682J
R 9116	(B,31,28)	RS1/16S682J
R 9117	(B,19,24)	RS1/16S223J
R 9118	(B,34,24)	RS1/16S223J
R 9119	(B,23,24)	RS1/16S223J
R 9120	(B,38,24)	RS1/16S223J
R 9121	(B,16,23)	RS1/16S682J
R 9122	(B,32,23)	RS1/16S682J
R 9123	(B,25,23)	RS1/16S682J
R 9124	(B,41,23)	RS1/16S682J
R 9125	(A,16,26)	RS1/16S682J
R 9126	(A,30,27)	RS1/16S682J
R 9127	(A,27,27)	RS1/16S682J
R 9128	(A,41,27)	RS1/16S682J
R 9129	(A,27,29)	RS1/16S223J
R 9130	(A,42,29)	RS1/16S223J
R 9131	(A,15,28)	RS1/16S223J
R 9132	(A,29,29)	RS1/16S223J
R 9141	(B,24,49)	RS1/16S222J
R 9142	(B,29,49)	RS1/16S222J
R 9143	(B,25,49)	RS1/16S222J
R 9144	(B,31,49)	RS1/16S222J
R 9145	(B,25,45)	RS1/16S682J
R 9146	(B,29,45)	RS1/16S682J
R 9147	(B,24,45)	RS1/16S682J
R 9148	(B,31,45)	RS1/16S682J
R 9149	(B,26,41)	RS1/16S223J
R 9150	(B,29,39)	RS1/16S223J
R 9151	(B,26,37)	RS1/16S682J
R 9152	(B,32,38)	RS1/16S682J
R 9153	(A,30,36)	RS1/16S682J
R 9154	(A,41,36)	RS1/16S682J
R 9155	(A,29,39)	RS1/16S223J
R 9156	(A,42,38)	RS1/16S223J
R 9161	(B,11,49)	RS1/16S222J
R 9162	(B,14,49)	RS1/16S222J
R 9163	(B,13,49)	RS1/16S222J
R 9164	(B,17,47)	RS1/16S222J
R 9165	(B,9,45)	RS1/16S682J
R 9166	(B,13,45)	RS1/16S682J
R 9167	(B,11,45)	RS1/16S682J
R 9168	(B,15,45)	RS1/16S682J
R 9169	(B,13,41)	RS1/16S223J
R 9170	(B,17,41)	RS1/16S223J
R 9171	(B,10,40)	RS1/16S682J
R 9172	(B,19,40)	RS1/16S682J
R 9173	(A,15,36)	RS1/16S682J
R 9174	(A,27,36)	RS1/16S682J
R 9175	(A,15,39)	RS1/16S223J
R 9176	(A,27,39)	RS1/16S223J
R 9181	(B,46,29)	RS1/16S182J
R 9182	(B,48,29)	RS1/16S182J
R 9183	(B,53,26)	RS1/16S472J
R 9184	(B,48,23)	RS1/16S472J
R 9185	(B,53,24)	RS1/16S153J
R 9186	(B,57,24)	RS1/16S153J
R 9187	(B,50,23)	RS1/16S472J
R 9188	(A,49,27)	RS1/16S472J
R 9189	(A,48,29)	RS1/16S153J
R 9202	(B,17,66)	RS1/16S223J
R 9204	(A,16,64)	RS1/16S393J
R 9205	(B,17,71)	RS1/16S0R0J

Circuit Symbol and No.		Part No.
R 9206	(B,9,64)	RS1/16S0R0J
R 9208	(B,12,69)	RS1/16S0R0J
R 9210	(A,20,78)	RS1/16S681J
R 9212	(A,17,78)	RS1/16S681J
R 9214	(A,18,78)	RS1/16S681J
R 9252	(A,16,46)	RS1/16S393J
R 9254	(B,12,63)	RS1/16S0R0J
R 9255	(A,20,59)	RS1/16S681J
R 9256	(A,17,59)	RS1/16S681J
R 9257	(A,18,59)	RS1/16S681J
R 9259	(B,19,51)	RS1/16S0R0J
R 9301	(A,34,58)	RS1/16S471J
R 9302	(A,35,48)	RS1/16S471J
R 9303	(A,34,52)	RS1/16S471J
R 9304	(A,36,62)	RS1/16S471J
R 9305	(A,33,114)	RS1/16S471J
R 9306	(A,31,117)	RS1/16S471J
R 9307	(A,36,109)	RS1/16S471J
R 9308	(A,38,105)	RS1/16S471J
R 9321	(A,32,122)	RS1/16S103J
R 9357	(A,11,26)	RS1/16S103J
R 9401	(B,78,40)	RS1/16S390J
R 9402	(B,74,40)	RS1/16S390J
R 9403	(B,71,40)	RS1/16S390J
R 9404	(B,68,40)	RS1/16S390J
R 9405	(B,64,44)	RS1/16S390J
R 9406	(B,61,44)	RS1/16S390J
R 9407	(B,58,44)	RS1/16S390J
R 9408	(B,55,44)	RS1/16S390J
R 9409	(A,64,23)	RS1/16S103J
R 9410	(A,64,20)	RS1/16S103J
R 9411	(A,49,23)	RS1/16S103J
R 9412	(A,49,20)	RS1/16S103J
R 9413	(A,34,23)	RS1/16S103J
R 9414	(A,34,21)	RS1/16S103J
R 9415	(A,19,23)	RS1/16S103J
R 9416	(A,19,21)	RS1/16S103J
R 9417	(A,70,23)	RS1/16S103J
R 9418	(B,76,38)	RS1/16S390J
R 9419	(B,79,38)	RS1/16S390J
R 9420	(A,71,20)	RS1/16S103J
R 9421	(A,57,23)	RS1/16S103J
R 9422	(B,68,37)	RS1/16S390J
R 9423	(B,71,37)	RS1/16S390J
R 9424	(A,56,20)	RS1/16S103J
R 9425	(A,42,23)	RS1/16S103J
R 9426	(B,61,40)	RS1/16S390J
R 9427	(B,64,40)	RS1/16S390J
R 9428	(A,41,20)	RS1/16S103J
R 9429	(A,27,23)	RS1/16S103J
R 9430	(B,55,40)	RS1/16S390J
R 9431	(B,58,40)	RS1/16S390J
R 9432	(A,26,21)	RS1/16S103J
R 9433	(B,75,14)	RS1/16S223J
R 9434	(B,68,14)	RS1/16S223J
R 9435	(B,61,14)	RS1/16S223J
R 9436	(B,53,14)	RS1/16S223J
R 9437	(B,47,14)	RS1/16S223J
R 9438	(B,34,13)	RS1/16S223J
R 9439	(B,30,13)	RS1/16S223J

Circuit Symbol and No.		Part No.
R 9440	(B,21,13)	RS1/16S223J
R 9441	(B,52,44)	RS1/16S390J
R 9442	(A,12,23)	RS1/16S103J
R 9443	(A,11,21)	RS1/16S103J
R 9444	(B,52,40)	RS1/16S390J
R 9445	(B,17,13)	RS1/16S223J
R 9451	(B,28,159)	RS1/16S681J
R 9452	(B,26,159)	RS1/16S681J
R 9453	(B,24,159)	RS1/16S681J
R 9454	(B,22,159)	RS1/16S681J
R 9455	(A,19,142)	RS1/16S0R0J

CAPACITORS

C 9001	(A,25,134)	CKSRYB104K25
C 9011	(B,75,131)	CKSRYB103K50
C 9012	(A,70,147)	CEVW100M16
C 9013	(B,78,124)	CKSRYB103K50
C 9022	(A,15,91)	CKSYB475K16
C 9023	(A,15,121)	CKSYB475K16
C 9024	(A,23,120) 47 µF/16 V	CCH1716
C 9025	(A,15,96) 120 µF/10 V	CCH1706
C 9026	(A,22,106)	CKSRYB473K50
C 9027	(A,26,106)	CKSRYB104K25
C 9028	(A,24,114)	CKSRYB104K25
C 9029	(B,22,104)	CCSRCH390J50
C 9030	(A,28,107)	CCSRCH121J50
C 9031	(A,28,110)	CKSRYB224K16
C 9032	(B,26,112)	CKSRYB102K50
C 9034	(A,11,37) 10 µF	CCG1182
C 9061	(A,20,153)	CEHVW330M16
C 9062	(B,26,142)	CKSRYB102K50
C 9101	(B,14,33)	CKSYB106K6R3
C 9102	(B,36,36)	CKSYB106K6R3
C 9103	(B,21,33)	CKSYB106K6R3
C 9104	(B,36,30)	CKSYB106K6R3
C 9105	(B,22,39)	CKSYB106K6R3
C 9106	(B,40,34)	CKSYB106K6R3
C 9107	(B,19,33)	CKSYB106K6R3
C 9108	(B,32,34)	CKSYB106K6R3
C 9109	(B,25,64)	CKSYB106K6R3
C 9110	(B,12,55)	CKSYB106K6R3
C 9111	(B,17,26)	CCSRCH221J50
C 9112	(B,31,26)	CCSRCH221J50
C 9113	(B,25,27)	CCSRCH221J50
C 9114	(B,41,26)	CCSRCH221J50
C 9115	(B,19,23)	CCSRCH560J50
C 9116	(B,34,22)	CCSRCH560J50
C 9117	(B,23,23)	CCSRCH560J50
C 9118	(B,38,22)	CCSRCH560J50
C 9119	(A,26,29)	CCSRCH560J50
C 9120	(A,40,29)	CCSRCH560J50
C 9121	(A,16,28)	CCSRCH560J50
C 9122	(A,31,29)	CCSRCH560J50
C 9123	(A,19,32)	CKSYB106K6R3
C 9124	(A,33,32)	CKSYB106K6R3
C 9125	(A,26,32)	CKSYB106K6R3
C 9126	(A,39,32)	CKSYB106K6R3
C 9141	(B,23,57)	CKSYB106K6R3
C 9142	(B,27,52)	CKSYB106K6R3
C 9145	(B,26,43)	CCSRCH221J50

Circuit Symbol and No.			Part No.
C 9146	(B,30,43)		CCSRCH221J50
C 9147	(B,26,39)		CCSRCH560J50
C 9148	(B,29,37)		CCSRCH560J50
C 9149	(A,31,39)		CCSRCH560J50
C 9150	(A,40,38)		CCSRCH560J50
C 9151	(A,31,42)		CKSYB106K6R3
C 9152	(A,37,45)		CKSYB106K6R3
C 9153	(B,26,58)		CKSYB106K6R3
C 9161	(B,9,55)		CKSYB106K6R3
C 9162	(B,17,55)		CKSYB106K6R3
C 9165	(B,10,43)		CCSRCH221J50
C 9166	(B,14,43)		CCSRCH221J50
C 9167	(B,13,39)		CCSRCH560J50
C 9168	(B,17,39)		CCSRCH560J50
C 9169	(A,16,39)		CCSRCH560J50
C 9170	(A,26,39)		CCSRCH560J50
C 9171	(A,19,42)		CKSYB106K6R3
C 9172	(A,25,42)		CKSYB106K6R3
C 9173	(B,14,55)		CKSYB106K6R3
C 9181	(B,45,37)		CKSYB106K6R3
C 9182	(B,45,34)		CKSYB106K6R3
C 9184	(B,49,27)		CCSRCH561J50
C 9185	(B,53,23)		CCSRCH151J50
C 9186	(B,57,23)		CCSRCH151J50
C 9187	(A,50,29)		CCSRCH151J50
C 9188	(A,46,29)		CKSYB106K6R3
C 9189	(A,12,39)	10 µF	CCG1182
C 9201	(B,21,63)		CKSRYB105K10
C 9202	(B,19,65)		CKSRYB105K10
C 9203	(A,12,77)		CEVW470M10
C 9204	(A,12,66)		CEVW470M10
C 9205	(B,12,67)		CKSRYB104K25
C 9206	(A,16,67)		CKSRYB104K16
C 9210	(A,16,70)		CKSRYB104K16
C 9251	(A,12,45)		CEVW470M10
C 9252	(A,16,49)		CKSRYB104K16
C 9253	(B,12,65)		CKSRYB104K25
C 9254	(A,16,52)		CKSRYB104K16
C 9255	(A,12,56)		CEVW470M10
C 9301	(A,39,53)		CKSRYB105K10
C 9302	(A,39,57)		CKSRYB105K10
C 9303	(A,39,56)		CKSRYB105K10
C 9304	(A,39,51)		CKSRYB105K10
C 9305	(A,35,56)		CKSRYB105K10
C 9306	(A,36,49)		CKSRYB105K10
C 9307	(A,36,52)		CKSRYB105K10
C 9308	(A,37,59)		CKSRYB105K10
C 9309	(A,38,118)		CKSRYB105K10
C 9310	(A,38,120)		CKSRYB105K10
C 9311	(A,34,118)		CKSRYB105K10
C 9312	(A,34,120)		CKSRYB105K10
C 9313	(A,38,115)		CKSRYB105K10
C 9314	(A,38,112)		CKSRYB105K10
C 9315	(A,36,112)		CKSRYB105K10
C 9316	(A,38,108)		CKSRYB105K10
C 9321	(A,38,66)		CEVW100M16
C 9322	(B,48,40)		CKSYB475K16
C 9323	(B,42,40)		CKSYB475K16
C 9324	(B,49,62)		CKSRYB104K25
C 9325	(A,29,87)	3 300 µF/16 V	CCH1583
C 9327	(B,48,124)		CKSRYB104K25
C 9328	(A,37,125)		CEVW100M16
C 9329	(A,31,144)	3 300 µF/16 V	CCH1583
C 9330	(B,48,102)		CKSYB475K16
C 9331	(B,42,102)		CKSYB475K16
C 9401	(B,78,45)		CKSYB106K10
C 9402	(B,74,45)		CKSYB106K10
C 9403	(B,71,45)		CKSYB106K10
C 9404	(B,68,45)		CKSYB106K10
C 9405	(B,64,49)		CKSYB106K10
C 9406	(B,61,49)		CKSYB106K10
C 9407	(B,58,49)		CKSYB106K10
C 9408	(B,55,49)		CKSYB106K10
C 9409	(B,73,14)		CKSRYB102K50
C 9410	(B,66,14)		CKSRYB102K50
C 9411	(B,59,14)		CKSRYB102K50
C 9412	(B,51,14)		CKSRYB102K50
C 9413	(B,45,14)		CKSRYB102K50
C 9414	(B,32,13)		CKSRYB102K50
C 9415	(B,28,13)		CKSRYB102K50
C 9416	(B,19,13)		CKSRYB102K50
C 9441	(B,52,49)		CKSYB106K10
C 9442	(B,15,13)		CKSRYB102K50
C 9443	(B,60,9)		CKSRYB104K25
C 9444	(B,38,9)		CKSRYB104K25
C 9445	(B,16,9)		CKSRYB104K25
C 9446	(B,74,9)		CKSRYB104K25
C 9447	(B,52,9)		CKSRYB104K25
C 9451	(A,10,138)		CKSQYB106K6R3

M

Unit Number : CWN2491
Unit Name : Tuner Selector Unit

MISCELLANEOUS

IC 8001	(A,27,82)	IC	PE5533A
IC 8003	(A,13,97)	IC	S-80841CNUA-B82
IC 8101	(A,89,82)	IC	CXA2069Q
IC 8201	(A,164,147)	IC	NJM4558V
IC 8202	(A,176,147)	IC	NJM4558V
IC 8203	(A,164,143)	IC	NJM4558V
IC 8204	(A,176,143)	IC	NJM4558V
IC 8251	(A,132,20)	IC	NJM2505AF
IC 8252	(A,138,30)	IC	NJM2505AF
IC 8301	(A,102,23)	IC	NJM4558V
IC 8302	(A,108,23)	IC	NJM4558V
IC 8303	(A,154,23)	IC	NJM4558V
IC 8304	(A,161,23)	IC	NJM4558V
IC 8305	(A,102,33)	IC	NJM4558V
IC 8306	(A,108,33)	IC	NJM4558V
IC 8307	(A,154,34)	IC	NJM4558V
IC 8308	(A,161,34)	IC	NJM4558V
IC 8401	(A,180,122)	IC	NJM4558V
IC 8451	(A,42,22)	IC	NJM2505AF
IC 8501	(B,162,95)	IC	NJM4558MD
IC 8502	(B,164,54)	IC	NJM2391DL1-33
IC 8504	(A,124,100)	IC	NJM2388F84
IC 8601	(A,118,141)	IC	NJM2505AF
IC 8651	(A,129,135)	IC	TPD1018F

Circuit Symbol and No.			Part No.
IC 8701	(A,134,73)	Regulator	BA00CC0WFP
IC 8751	(A,94,24)	IC	BA7623F
IC 8901	(A,72,56)	IC	NJM2505AF
IC 8902	(A,66,56)	IC	NJM2505AF
IC 8903	(A,59,56)	IC	NJM2505AF
IC 8904	(A,65,43)	IC	NJM2515V
Q 8001	(B,16,96)	Chip Transistor	DTA114EUA
Q 8002	(A,81,165)	Transistor	2SC4081
Q 8003	(A,90,166)	Transistor	2SA1576A
Q 8051	(B,27,81)	Transistor	UMH1N
Q 8052	(B,22,75)	Transistor	UMH1N
Q 8053	(B,30,73)	Chip Transistor	DTC124EUA
Q 8102	(B,152,85)	Transistor	FMG12
Q 8103	(B,133,86)	Transistor	UMD2N
Q 8401	(B,175,131)	Transistor	2SC4081
Q 8402	(A,110,130)	Chip Transistor	DTA144EUA
Q 8403	(B,118,141)	Transistor	2SC4081
Q 8451	(B,49,12)	Transistor	2SC4081
Q 8452	(B,43,16)	Transistor	2SA1576A
Q 8502	(B,184,108)	Transistor	2SA1576A
Q 8507	(B,184,101)	Transistor	2SA1576A
Q 8601	(B,171,155)	Transistor	2SA1576A
Q 8602	(B,168,155)	Chip Transistor	DTC124EUA
Q 8603	(A,104,139)	Transistor	2SA1576A
Q 8604	(A,114,128)	Transistor	2SA1576A
Q 8605	(A,96,138)	Transistor	2SC4081
Q 8701	(B,136,56)	Transistor	2SD1664
Q 8702	(B,150,107)	Transistor	2SD1760F5
Q 8703	(B,122,97)	Transistor	2SC4081
Q 8705	(B,132,135)	Chip Transistor	DTC124EUA
Q 8706	(B,128,140)	Transistor	2SB1132
Q 8707	(B,146,160)	Transistor	2SA1576A
Q 8708	(A,146,148)	Transistor	2SC4081
Q 8709	(B,133,156)	Transistor	IMX1
Q 8710	(B,51,81)	Transistor	UMF23N
Q 8711	(B,139,138)	Transistor	2SD1664
Q 8712	(A,156,128)	Transistor	IMD3A
Q 8751	(A,85,39)	Transistor	2SC4081
Q 8752	(B,90,32)	Transistor	2SA1576A
Q 8753	(A,82,39)	Transistor	2SC4081
Q 8754	(B,95,33)	Transistor	2SA1576A
Q 8801	(A,131,114)	Transistor	FMG12
Q 8802	(B,124,123)	Chip Transistor	DTA114EUA
Q 8803	(B,129,84)	Transistor	2SC4081
Q 8804	(B,136,86)	Transistor	2SA1576A
Q 8805	(A,111,55)	Digital Transistor	DTC144EUA
Q 8806	(A,107,54)	Transistor	2SA1576A
Q 8807	(A,115,51)	Transistor	FMG12
Q 8809	(B,122,84)	Digital Transistor	DTC144EUA
Q 8901	(B,75,16)	Transistor	2SC4081
Q 8902	(A,15,71)	Transistor	2SC4081
D 8001	(B,9,87)	Diode	1SS355
D 8002	(A,13,93)	Diode	1SS355
D 8003	(A,78,164)	Diode	RB160M-40
D 8004	(A,88,165)	Diode	RB160M-40
D 8101	(A,85,98)	Diode	1SR154-400
D 8102	(B,153,92)	Diode	DAP202U
D 8201	(A,161,151)	Diode	UDZS5R6(B)
D 8202	(A,168,151)	Diode	UDZS5R6(B)
D 8203	(A,158,150)	Diode	UDZS5R6(B)

Circuit Symbol and No.			Part No.
D 8204	(A,168,149)	Diode	UDZS5R6(B)
D 8205	(A,167,139)	Diode	UDZS4R7(B)
D 8206	(A,179,139)	Diode	UDZS4R7(B)
D 8251	(B,98,9)	Diode	HZU2R7(B1)
D 8252	(B,95,9)	Diode	HZU2R7(B1)
D 8253	(B,137,15)	Diode	HZU2R7(B1)
D 8254	(B,140,20)	Diode	HZU2R7(B1)
D 8301	(B,95,18)	Diode	UDZS5R6(B)
D 8302	(B,110,10)	Diode	UDZS5R6(B)
D 8303	(B,97,27)	Diode	UDZS5R6(B)
D 8304	(B,113,10)	Diode	UDZS5R6(B)
D 8305	(B,148,19)	Diode	UDZS5R6(B)
D 8306	(B,170,19)	Diode	UDZS5R6(B)
D 8307	(B,148,24)	Diode	UDZS5R6(B)
D 8308	(B,168,19)	Diode	UDZS5R6(B)
D 8309	(B,113,33)	Diode	UDZS4R7(B)
D 8310	(B,116,33)	Diode	UDZS4R7(B)
D 8311	(B,150,30)	Diode	UDZS4R7(B)
D 8312	(B,158,30)	Diode	UDZS4R7(B)
D 8451	(A,50,10)	Diode	UDZS12(B)
D 8452	(A,27,29)	Diode	UDZS5R6(B)
D 8453	(A,29,29)	Diode	UDZS5R6(B)
D 8454	(B,49,17)	Diode	1SS355
D 8456	(B,46,28)	Diode	1SS355
D 8501	(B,168,102)	Diode	UDZS5R6(B)
D 8503	(B,156,52)	Diode	1SR154-400
D 8504	(B,152,52)	Diode	1SR154-400
D 8505	(B,146,54)	Diode	1SR154-400
D 8601	(B,101,144)	Diode	UMZ6R8EN
D 8602	(B,97,144)	Diode	UMZ6R8EN
D 8603	(B,108,142)	Diode	UMZ6R8EN
D 8604	(B,104,144)	Diode	UMZ6R8EN
D 8605	(B,109,150)	Diode	HZU2R7(B1)
D 8606	(A,112,149)	Diode	HZU2R7(B1)
D 8607	(A,116,148)	Diode	HZU2R7(B1)
D 8608	(B,119,161)	Diode	HZU2R7(B1)
D 8609	(B,104,150)	Diode	HZU2R7(B1)
D 8610	(A,112,147)	Diode	HZU2R7(B1)
D 8611	(A,112,145)	Diode	HZU2R7(B1)
D 8612	(B,114,161)	Diode	HZU2R7(B1)
D 8651	(A,138,137)	Diode	S1G-6904G2P
D 8652	(A,138,134)	Diode	S1G-6904G2P
D 8701	(B,139,52)	Diode	UDZS5R6(B)
D 8702	(A,146,103)	Diode	1SS355
D 8703	(B,130,98)	Diode	UDZS8R2(B)
D 8705	(B,149,158)	Diode	DAN202U
D 8706	(A,138,151)	Diode	1SR154-400
D 8707	(A,151,150)	Diode	UDZS6R8(B)
D 8708	(A,138,148)	Diode	1SR154-400
D 8709	(B,138,160)	Diode	HZU7L(C3)
D 8710	(B,145,135)	Diode	UDZS9R1(B)
D 8711	(A,154,119)	Diode	1SR154-400
D 8712	(A,168,128)	Diode	UDZS5R6(B)
D 8751	(B,84,19)	Diode	MA153
D 8752	(B,89,20)	Diode	MA153
D 8801	(B,124,119)	Diode	DAP202K
D 8802	(B,122,89)	Diode	DAN202U
D 8803	(B,126,84)	Diode	DAN202U
D 8804	(B,115,90)	Diode	DAN202U
D 8806	(A,111,51)	Diode	DAP202K

Circuit Symbol and No.			Part No.
D 8807	(B,116,84)	Diode	DAN202U
D 8901	(B,59,37)	Diode	UDZS20(B)
ZNR8501	(B,184,38)	Surge Protector	RCCA-201Q31UA-PI
L 8001	(A,32,95)	Inductor	CTF1379
L 8002	(A,29,69)	Inductor	CTF1379
L 8003	(A,25,69)	Inductor	CTF1379
L 8004	(A,26,97)	Inductor	LCKAW2R2J2520
L 8005	(A,13,80)	Inductor	CTF1379
L 8101	(A,94,95)	Inductor	CTF1473
L 8251	(A,128,17)	Inductor	CTF1473
L 8252	(A,136,25)	Inductor	CTF1473
L 8451	(A,46,9)	Inductor	CTF1379
L 8452	(B,44,24)	Inductor	CTF1473
L 8453	(A,40,25)	Inductor	CTF1473
L 8501	(B,187,45)	Chip Coil	LCTAW4R7J2520
L 8502	(B,180,93)	Inductor	LCYC2R2K2125
L 8503	(B,179,83)	Inductor	LCYC1R0K2125
L 8504	(B,184,56)	Inductor	LCYC1R0K2125
L 8601	(A,119,137)	Inductor	CTF1473
L 8602	(A,106,154)	Inductor-Array	CTF1542
L 8603	(A,106,150)	Inductor-Array	CTF1542
L 8604	(A,110,142)	Inductor	CTF1379
L 8701	(B,155,158)	Inductor	LCTC2R2K1608
L 8703	(A,155,150)	Inductor	CTF1295
L 8751	(A,90,18)	Inductor	LCYC100K2125
L 8771	(B,82,27)	Chip Ferrite Bead	CTF1399
L 8772	(B,84,27)	Chip Ferrite Bead	CTF1399
L 8901	(A,74,52)	Inductor	CTF1473
L 8902	(A,68,52)	Inductor	CTF1473
L 8903	(A,62,52)	Inductor	CTF1473
L 8904	(A,65,52)	Inductor	CTF1473
X 8001	(A,14,86)	Oscillator 18.874 368 MHz	CSS1622
S 8251	(A,121,23)	Slide Switch(Video input)	CSH1065
VR8751	(A,90,38)	Semi-fixed 220 kΩ(OB)	CCP1479
VR8752	(A,93,38)	Semi-fixed 220 kΩ(OB)	CCP1479
VR8901	(A,69,21)	Semi-fixed 100 kΩ(OB)	CCP1477
VR8902	(A,62,21)	Semi-fixed 100 kΩ(OB)	CCP1477
VR8903	(A,53,21)	Semi-fixed 100 kΩ(OB)	CCP1477
⚠FU8251	(A,118,31)	Fuse 3 A	CEK1286
⚠FU8301	(A,112,27)	Fuse 3 A	CEK1286
⚠FU8451	(A,34,19)	Fuse 3 A	CEK1286
⚠FU8452	(A,32,19)	Fuse 5 A	CEK1289
⚠FU8601	(A,95,163)	Fuse 3 A	CEK1286
⚠FU8602	(A,116,146)	Fuse 3 A	CEK1286
⚠FU8751	(A,136,21)	Fuse 3 A	CEK1286
⚠FU8752	(A,168,18)	Fuse 3 A	CEK1286
⚠FU8901	(B,51,19)	Fuse 5 A	CEK1289
⚠FU8902	(A,75,20)	Fuse 3 A	CEK1286
⚠FU8903	(A,52,36)	Fuse 3 A	CEK1286
⚠FU8904	(A,59,35)	Fuse 3 A	CEK1286
⚠FU8905	(A,70,56)	Fuse 3 A	CEK1286
⚠FU8906	(A,63,57)	Fuse 3 A	CEK1286
⚠FU8907	(A,57,59)	Fuse 3 A	CEK1286
Y 8501	(A,188,49)	FM/AM Tuner Unit	CWE1806

RESISTORS

Circuit Symbol and No.		Part No.
R 8001	(B,42,76)	RS1/16S473J
R 8004	(B,26,86)	RS1/16S471J
R 8005	(B,43,87)	RS1/16S473J
R 8006	(B,46,85)	RS1/16S473J
R 8007	(B,46,83)	RS1/16S104J
R 8008	(B,21,96)	RS1/16S0R0J
R 8009	(B,37,80)	RS1/16S473J
R 8011	(B,46,81)	RS1/16S104J
R 8012	(B,30,85)	RS1/16S471J
R 8014	(B,35,72)	RS1/16S0R0J
R 8016	(B,45,93)	RS1/16S182J
R 8017	(A,39,76)	RS1/16S0R0J
R 8018	(B,45,91)	RS1/16S182J
R 8020	(A,21,92)	RS1/16S0R0J
R 8021	(B,40,71)	RS1/16S102J
R 8022	(B,41,94)	RS1/16S681J
R 8023	(A,34,71)	RS1/16S473J
R 8024	(B,41,98)	RS1/16S471J
R 8025	(B,46,99)	RS1/16S471J
R 8026	(B,36,96)	RS1/16S681J
R 8028	(B,27,89)	RS1/16S473J
R 8029	(B,21,94)	RS1/16S473J
R 8030	(B,21,90)	RS1/16S104J
R 8031	(B,9,62)	RS1/16S681J
R 8034	(A,17,85)	RS1/16S101J
R 8035	(B,19,86)	RS1/16S473J
R 8037	(A,13,91)	RS1/16S102J
R 8038	(B,5,62)	RS1/16S473J
R 8042	(A,10,93)	RS1/16S104J
R 8045	(A,80,160)	RS1/16S122J
R 8046	(B,41,74)	RS1/16S0R0J
R 8047	(B,32,81)	RS1/16S0R0J
R 8048	(A,36,67)	RS1/16S0R0J
R 8049	(B,33,93)	RS1/16S681J
R 8050	(B,33,91)	RS1/16S681J
R 8051	(B,18,67)	RS1/16S152J
R 8052	(B,24,81)	RS1/16S182J
R 8053	(B,21,80)	RS1/16S272J
R 8054	(B,25,74)	RS1/16S822J
R 8055	(A,81,162)	RS1/16S102J
R 8056	(B,20,67)	RS1/16S152J
R 8059	(B,17,67)	RS1/16S152J
R 8060	(B,19,78)	RS1/16S182J
R 8061	(B,19,74)	RS1/16S272J
R 8062	(A,38,67)	RS1/16S822J
R 8063	(B,72,29)	RS1/16S103J
R 8064	(A,91,163)	RS1/16S102J
R 8065	(A,93,162)	RS1/16S681J
R 8066	(A,93,165)	RS1/16S102J
R 8067	(A,85,165)	RS1/16S471J
R 8068	(A,84,165)	RS1/16S102J
R 8104	(B,119,74)	RS1/16S223J
R 8105	(B,121,70)	RS1/16S223J
R 8107	(B,100,74)	RS1/16S0R0J
R 8108	(B,99,88)	RS1/16S470J
R 8109	(B,115,73)	RS1/16S622J
R 8112	(B,106,76)	RS1/16S622J
R 8113	(B,97,89)	RS1/16S470J
R 8114	(A,98,65)	RS1/16S474J
R 8115	(A,95,65)	RS1/16S474J
R 8116	(A,98,70)	RS1/16S622J
R 8117	(B,84,91)	RS1/16S102J
R 8118	(A,91,65)	RS1/16S474J
R 8119	(A,95,70)	RS1/16S622J

Circuit Symbol and No.		Part No.
R 8120	(A,90,70)	RS1/16S622J
R 8121	(B,91,97)	RS1/16S821J
R 8122	(B,91,99)	RS1/16S821J
R 8123	(A,87,70)	RS1/16S622J
R 8124	(A,83,70)	RS1/16S622J
R 8125	(A,88,65)	RS1/16S474J
R 8126	(B,86,69)	RS1/16S474J
R 8127	(A,81,70)	RS1/16S622J
R 8128	(A,75,72)	RS1/16S622J
R 8129	(B,146,87)	RS1/16S102J
R 8131	(B,81,67)	RS1/16S474J
R 8133	(A,74,78)	RS1/16S622J
R 8136	(A,74,70)	RS1/16S474J
R 8141	(A,72,84)	RS1/16S474J
R 8201	(B,162,149)	RS1/16S102J
R 8202	(B,173,149)	RS1/16S102J
R 8203	(B,166,151)	RS1/16S181J
R 8204	(B,177,151)	RS1/16S181J
R 8205	(B,161,151)	RS1/16S223J
R 8206	(B,173,151)	RS1/16S223J
R 8207	(B,162,145)	RS1/16S473J
R 8208	(B,174,145)	RS1/16S473J
R 8209	(B,166,147)	RS1/16S473J
R 8210	(B,177,147)	RS1/16S473J
R 8211	(A,158,147)	RS1/16S1002D
R 8212	(A,171,147)	RS1/16S1002D
R 8213	(B,166,145)	RS1/16S1002D
R 8214	(B,178,145)	RS1/16S1002D
R 8215	(B,163,142)	RS1/16S1002D
R 8216	(B,175,142)	RS1/16S1002D
R 8217	(A,159,140)	RS1/16S1002D
R 8218	(A,172,140)	RS1/16S1002D
R 8219	(A,169,143)	RS1/16S472J
R 8220	(A,181,143)	RS1/16S472J
R 8221	(B,166,142)	RS1/16S0R0J
R 8222	(B,179,142)	RS1/16S0R0J
R 8251	(B,126,20)	RS1/16S750J
R 8252	(B,139,25)	RS1/16S750J
R 8253	(B,132,19)	RS1/16S101J
R 8254	(B,130,19)	RS1/16S101J
R 8255	(B,138,29)	RS1/16S101J
R 8256	(B,141,31)	RS1/16S101J
R 8301	(B,101,16)	RS1/16S822J
R 8302	(B,119,12)	RS1/16S822J
R 8303	(B,103,25)	RS1/16S822J
R 8304	(B,109,25)	RS1/16S822J
R 8305	(B,103,19)	RS1/16S183J
R 8306	(B,118,15)	RS1/16S183J
R 8307	(B,153,15)	RS1/16S822J
R 8308	(B,159,17)	RS1/16S822J
R 8309	(B,153,19)	RS1/16S822J
R 8310	(B,162,19)	RS1/16S822J
R 8311	(B,99,35)	RS1/16S473J
R 8312	(B,160,19)	RS1/16S183J
R 8313	(B,154,19)	RS1/16S183J
R 8314	(B,106,33)	RS1/16S473J
R 8315	(B,152,25)	RS1/16S473J
R 8316	(B,160,24)	RS1/16S473J
R 8317	(B,101,20)	RS1/16S473J
R 8318	(B,107,20)	RS1/16S473J

Circuit Symbol and No.		Part No.
R 8319	(A,104,27)	RS1/16S1002D
R 8320	(A,110,27)	RS1/16S1002D
R 8321	(A,102,17)	RS1/16S1002D
R 8322	(A,110,17)	RS1/16S1002D
R 8323	(B,150,25)	RS1/16S473J
R 8324	(B,158,24)	RS1/16S473J
R 8325	(A,103,38)	RS1/16S1002D
R 8326	(B,163,35)	RS1/16S1002D
R 8327	(A,100,39)	RS1/16S1002D
R 8328	(A,165,18)	RS1/16S1002D
R 8329	(B,156,35)	RS1/16S1002D
R 8330	(A,109,38)	RS1/16S1002D
R 8331	(A,157,18)	RS1/16S1002D
R 8332	(A,106,39)	RS1/16S1002D
R 8333	(A,154,39)	RS1/16S1002D
R 8334	(A,161,39)	RS1/16S1002D
R 8335	(B,154,36)	RS1/16S1002D
R 8336	(B,162,36)	RS1/16S1002D
R 8337	(B,97,18)	RS1/16S472J
R 8338	(B,106,26)	RS1/16S472J
R 8339	(B,150,36)	RS1/16S472J
R 8340	(B,158,36)	RS1/16S472J
R 8401	(A,184,137)	RS1/16S223J
R 8402	(A,170,120)	RS1/16S223J
R 8403	(A,172,123)	RS1/16S223J
R 8404	(A,190,120)	RS1/16S223J
R 8405	(A,170,123)	RS1/16S223J
R 8406	(A,188,123)	RS1/16S223J
R 8407	(A,175,123)	RS1/16S223J
R 8408	(A,185,123)	RS1/16S223J
R 8409	(A,184,130)	RS1/16S223J
R 8410	(A,190,123)	RS1/16S223J
R 8411	(A,184,141)	RS1/16S0R0J
R 8412	(B,117,138)	RS1/16S104J
R 8413	(B,122,148)	RS1/16S473J
R 8417	(B,176,127)	RS1/16S102J
R 8423	(B,179,131)	RS1/16S103J
R 8425	(B,177,127)	RS1/16S103J
R 8451	(A,48,11)	RS1/16S0R0J
R 8452	(A,42,15)	RS1/16S750J
R 8453	(B,44,28)	RS1/16S0R0J
R 8454	(B,46,17)	RS1/16S472J
R 8455	(B,43,20)	RS1/16S103J
R 8456	(B,44,20)	RS1/16S103J
R 8457	(B,45,13)	RS1/16S103J
R 8458	(B,51,11)	RS1/16S103J
R 8459	(A,43,19)	RS1/16SS101J
R 8460	(A,40,20)	RS1/16SS101J
R 8501	(B,178,104)	RS1/16S561J
R 8502	(B,182,106)	RS1/16S222J
R 8503	(B,165,75)	RS1/16S681J
R 8504	(B,184,66)	RS1/16S681J
R 8505	(B,184,64)	RS1/16S681J
R 8506	(B,184,62)	RS1/16S681J
R 8507	(B,177,99)	RS1/16S561J
R 8508	(B,174,105)	RS1/16S123J
R 8510	(B,184,68)	RS1/16S681J
R 8511	(B,181,100)	RS1/16S222J
R 8512	(B,184,69)	RS1/16S681J
R 8514	(B,182,61)	RS1/16S471J

Circuit Symbol and No.		Part No.
R 8517	(B,174,99)	RS1/16S123J
R 8518	(B,171,105)	RS1/16S823J
R 8520	(B,157,100)	RS1/16S123J
R 8521	(B,170,96)	RS1/16S823J
R 8522	(B,161,102)	RS1/16S823J
R 8523	(B,164,103)	RS1/16S681J
R 8525	(A,123,63)	RAB4C473J
R 8526	(B,157,104)	RS1/16S821J
R 8527	(B,160,88)	RS1/16S123J
R 8529	(B,163,89)	RS1/16S823J
R 8530	(B,184,77)	RS1/16S0R0J
R 8531	(B,157,83)	RS1/16S821J
R 8532	(B,126,108)	RS1/16S102J
R 8535	(B,165,114)	RS1/16S0R0J
R 8537	(B,91,162)	RS1/16S0R0J
R 8538	(B,118,97)	RS1/16S0R0J
R 8539	(B,158,92)	RS1/16S0R0J
R 8560	(A,38,63)	RS1/16S104J
R 8562	(B,22,35)	RS1/16S104J
R 8566	(B,23,34)	RS1/16S104J
R 8576	(B,20,35)	RS1/16S102J
R 8577	(B,32,35)	RS1/16S102J
R 8601	(A,120,148)	RS1/16S750J
R 8602	(A,102,155)	RS1/16S0R0J
R 8603	(A,102,154)	RS1/16S0R0J
R 8604	(A,98,146)	RS1/16S102J
R 8605	(A,100,139)	RS1/16S102J
R 8606	(A,105,145)	RS1/16S102J
R 8607	(A,108,142)	RS1/16S102J
R 8608	(B,111,145)	RS1/16S0R0J
R 8609	(B,113,144)	RS1/16S0R0J
R 8610	(B,115,145)	RS1/16S0R0J
R 8611	(B,117,146)	RS1/16S0R0J
R 8612	(B,118,145)	RS1/16S0R0J
R 8613	(B,120,146)	RS1/16S0R0J
R 8621	(A,124,152)	RS1/16S47R0D
R 8622	(A,125,152)	RS1/16S0R0J
R 8623	(A,123,148)	RS1/16S0R0J
R 8624	(A,125,148)	RS1/16S0R0J
R 8626	(B,168,158)	RS1/16S562J
R 8627	(B,171,158)	RS1/16S332J
R 8628	(A,107,142)	RS1/16S102J
R 8629	(A,106,147)	RS1/16S0R0J
R 8630	(A,108,147)	RS1/16S0R0J
R 8631	(A,103,145)	RS1/16S223J
R 8632	(A,102,139)	RS1/16S0R0J
R 8636	(B,174,155)	RS1/16S222J
R 8637	(A,121,148)	RS1/16S4R7J
R 8639	(A,118,129)	RS1/16S104J
R 8641	(A,117,144)	RS1/16SS101J
R 8644	(A,100,146)	RS1/16S0R0J
R 8645	(A,104,142)	RS1/16S682J
R 8646	(A,114,131)	RS1/16S682J
R 8647	(A,114,132)	RS1/16S223J
R 8648	(A,95,135)	RS1/16S103J
R 8649	(A,94,133)	RS1/16S102J
R 8650	(A,120,143)	RS1/16SS101J
R 8651	(A,129,130)	RS1/16S103J
R 8701	(A,128,53)	RS1/16S0R0J
R 8702	(A,148,102)	RS1/16S103J
R 8703	(B,139,57)	RS1/16S102J
R 8704	(A,155,125)	RS1/16S102J
R 8705	(A,129,68)	RS1/16S102J
R 8706	(A,158,125)	RS1/16S102J
R 8707	(A,148,105)	RS1/16S103J
R 8708	(A,135,64)	RS1/16S274J
R 8709	(A,137,64)	RS1/16S223J
R 8710	(B,127,96)	RS1/16S104J
R 8711	(A,138,64)	RS1/16S473J
R 8712	(A,138,67)	RS1/16S0R0J
R 8713	(B,135,95)	RS1/16S473J
R 8714	(A,155,123)	RS1/16S223J
R 8715	(A,184,143)	RS1/16S0R0J
R 8716	(B,183,145)	RS1/16S0R0J
R 8718	(B,128,134)	RS1/16S102J
R 8719	(B,151,150)	RS1/16S104J
R 8720	(B,129,153)	RS1/16S472J
R 8721	(B,149,162)	RS1/16S473J
R 8722	(B,128,136)	RS1/16S223J
R 8723	(B,146,157)	RS1/16S473J
R 8724	(B,131,153)	RS1/16S473J
R 8725	(B,133,139)	RAB4C331J
R 8726	(A,146,151)	RS1/16S103J
R 8727	(A,149,149)	RS1/16S103J
R 8728	(B,153,157)	RS1/16S103J
R 8729	(B,134,161)	RS1/16S104J
R 8730	(A,153,150)	RS1/16S103J
R 8731	(B,132,161)	RS1/16S473J
R 8732	(B,49,82)	RS1/16S472J
R 8733	(B,50,85)	RS1/16S472J
R 8734	(B,55,82)	RS1/16S102J
R 8735	(A,159,122)	RS1/16S2R2J
R 8736	(A,159,120)	RS1/16S2R2J
R 8737	(A,157,122)	RS1/16S2R2J
R 8738	(A,157,120)	RS1/16S2R2J
R 8739	(B,144,141)	RS1/16S471J
R 8740	(B,144,139)	RS1/16S471J
R 8751	(A,100,52)	RS1/16S22R0D
R 8753	(A,87,26)	RS1/16S513J
R 8754	(B,95,26)	RS1/16S683J
R 8755	(A,90,26)	RS1/16S513J
R 8756	(B,91,26)	RS1/16S683J
R 8757	(B,92,84)	RS1/16S821J
R 8758	(B,93,81)	RS1/16S821J
R 8759	(A,46,25)	RS1/16S560J
R 8760	(A,46,22)	RS1/16S150J
R 8761	(A,47,18)	RS1/16S0R0J
R 8762	(A,89,26)	RS1/16S513J
R 8763	(B,93,26)	RS1/16S683J
R 8764	(A,142,29)	RS1/16S560J
R 8765	(A,142,26)	RS1/16S150J
R 8766	(A,141,23)	RS1/16S0R0J
R 8767	(A,84,30)	RS1/16S223J
R 8768	(A,86,26)	RS1/16S223J
R 8769	(B,88,37)	RS1/16S681J
R 8770	(B,92,32)	RS1/16S152J
R 8771	(A,86,30)	RS1/16S681J
R 8772	(A,82,26)	RS1/16S223J
R 8773	(A,84,26)	RS1/16S223J
R 8774	(B,92,37)	RS1/16S681J

Circuit Symbol and No.			Part No.
R 8775	(B,97,35)		RS1/16S152J
R 8776	(B,83,30)		RS1/16S681J
R 8778	(B,143,25)		RS1/16S470J
R 8779	(A,47,22)		RS1/16S470J
R 8782	(B,82,35)		RS1/16S0R0J
R 8783	(B,85,36)		RS1/16S470J
R 8784	(B,85,34)		RS1/16S470J
R 8801	(B,125,87)		RS1/16S473J
R 8802	(B,129,87)		RS1/16S224J
R 8803	(B,133,81)		RS1/16S223J
R 8804	(B,136,83)		RS1/16S473J
R 8805	(A,110,57)		RS1/16S0R0J
R 8806	(A,107,52)		RS1/16S103J
R 8807	(A,107,50)		RS1/16S103J
R 8808	(B,75,35)		RS1/16S223J
R 8809	(B,75,38)		RS1/16S223J
R 8810	(B,126,81)		RS1/16S473J
R 8851	(B,94,121)		RS1/16S0R0J
R 8852	(B,87,120)		RS1/16S0R0J
R 8901	(A,67,64)		RS1/16S750J
R 8902	(A,64,64)		RS1/16S750J
R 8903	(A,61,64)		RS1/16S750J
R 8904	(B,75,47)		RS1/16S0R0J
R 8905	(B,66,47)		RS1/16S0R0J
R 8906	(A,18,71)		RS1/16S103J
R 8907	(A,72,22)		RS1/16S510J
R 8908	(A,72,20)		RS1/16S101J
R 8909	(A,64,22)		RS1/16S510J
R 8910	(A,65,20)		RS1/16S101J
R 8911	(A,56,22)		RS1/16S510J
R 8912	(A,56,20)		RS1/16S101J
R 8913	(A,13,72)		RS1/16S103J
R 8914	(A,71,59)		RS1/16SS101J
R 8915	(A,69,59)		RS1/16SS101J
R 8916	(A,65,59)		RS1/16SS101J
R 8917	(B,75,20)		RS1/16S103J
R 8918	(B,73,20)		RS1/16S102J
R 8919	(B,45,38)		RS1/16S0R0J
R 8920	(A,67,24)		RS1/16S0R0J
R 8921	(A,76,25)		RS1/16S0R0J
R 8922	(A,64,59)		RS1/16SS101J
R 8923	(A,61,58)		RS1/16SS101J
R 8924	(B,79,16)		RS1/16S473J
R 8925	(A,59,58)		RS1/16SS101J
R 8928	(A,72,38)		RS1/16S103J

CAPACITORS

Circuit Symbol and No.			Part No.
C 8001	(A,31,71)		CKSRYB102K50
C 8002	(A,30,71)		CKSRYB102K50
C 8003	(A,30,93)		CKSRYB102K50
C 8004	(A,28,71)		CKSRYB104K25
C 8005	(A,30,94)		CKSRYB104K25
C 8007	(A,24,72)		CKSRYB104K25
C 8008	(A,25,72)		CKSRYB102K50
C 8009	(A,19,92)		CKSRYB104K25
C 8010	(A,20,97)		CEVW470M6R3
C 8011	(B,18,91)		CKSRYB102K50
C 8012	(A,17,80)		CKSRYB102K50
C 8013	(A,11,84)		CCSRCH100D50
C 8014	(A,11,87)		CCSRCH100D50
C 8015	(B,23,87)		CKSRYB105K10
C 8016	(A,15,80)		CKSRYB104K25
C 8018	(B,13,94)		CKSRYB105K10
C 8020	(A,91,162)		CKSRYB102K50
C 8102	(B,108,76)		CKSRYB105K10
C 8103	(B,117,73)		CKSRYB105K10
C 8106	(A,105,83)		CKSRYB104K25
C 8107	(A,103,72)	10 µF	CCG1171
C 8108	(A,103,66)		CKSRYB104K25
C 8109	(A,107,83)		CKSRYB104K25
C 8110	(A,104,83)		CKSRYB104K25
C 8111	(B,98,74)		CKSRYB104K25
C 8112	(A,98,67)		CKSRYB105K10
C 8113	(B,95,74)		CKSRYB104K25
C 8114	(A,90,67)		CKSRYB105K10
C 8115	(A,93,70)		CKSRYB104K25
C 8116	(B,93,74)		CKSRYB104K25
C 8117	(A,95,67)		CKSRYB105K10
C 8118	(A,91,93)		CKSRYB104K25
C 8119	(B,89,74)		CKSRYB104K25
C 8120	(A,92,98)		CEVW220M16
C 8121	(A,87,95)	10 µF	CCG1171
C 8122	(A,82,95)	10 µF	CCG1171
C 8123	(A,84,44)	10 µF	CCG1171
C 8124	(B,84,69)		CKSRYB105K10
C 8125	(A,85,70)		CKSRYB104K25
C 8126	(B,86,74)		CKSRYB104K25
C 8127	(A,87,67)		CKSRYB105K10
C 8128	(B,91,88)		CKSRYB104K25
C 8129	(B,80,90)		CKSYB106K6R3
C 8130	(B,83,74)		CKSRYB104K25
C 8131	(B,91,86)		CKSRYB104K25
C 8133	(B,81,74)		CKSRYB104K25
C 8134	(A,71,72)	10 µF	CCG1171
C 8135	(B,79,67)		CKSRYB105K10
C 8136	(A,74,76)		CKSRYB104K25
C 8139	(A,71,79)	10 µF	CCG1171
C 8201	(B,187,155)		CKSRYB103K50
C 8202	(A,173,149)		CCSRCH471J50
C 8203	(A,161,149)		CCSRCH471J50
C 8204	(B,173,147)		CKSQYB106K6R3
C 8205	(B,162,147)		CKSQYB106K6R3
C 8206	(B,177,149)		CKSQYB106K6R3
C 8207	(B,166,149)		CKSQYB106K6R3
C 8208	(B,173,142)		CCSRCH820J50
C 8209	(B,161,142)		CCSRCH820J50
C 8210	(A,171,140)		CCSRCH820J50
C 8211	(A,158,140)		CCSRCH820J50
C 8212	(A,181,140)		CKSRYB104K25
C 8213	(A,169,140)		CKSRYB104K25
C 8214	(A,175,137)		CEVW100M16
C 8215	(A,163,137)		CEVW100M16
C 8216	(A,177,149)		CKSRYB104K25
C 8217	(A,164,149)		CKSRYB104K25
C 8218	(A,169,134)		CEVW220M16
C 8219	(A,157,134)		CEVW220M16
C 8251	(B,129,16)		CKSRYB105K10
C 8252	(B,137,25)		CKSRYB105K10
C 8253	(B,128,19)		CKSRYB105K10
C 8254	(B,141,27)		CKSRYB105K10

Circuit Symbol and No.		Part No.
C 8255	(A,131,17)	CKSRYB104K25
C 8256	(A,138,27)	CKSRYB104K25
C 8257	(B,137,8)	CKSRYB104K25
C 8258	(B,141,10)	CKSRYB104K25
C 8301	(B,101,25)	CCSRCH471J50
C 8302	(B,108,20)	CCSRCH471J50
C 8303	(B,101,34)	CKSYB106K6R3
C 8304	(B,108,34)	CKSYB106K6R3
C 8305	(A,98,17)	CKSYB106K6R3
C 8306	(B,164,17)	CCSRCH471J50
C 8307	(B,150,19)	CCSRCH471J50
C 8308	(A,106,17)	CKSYB106K6R3
C 8309	(B,154,24)	CKSYB106K6R3
C 8310	(B,162,24)	CKSYB106K6R3
C 8311	(A,153,17)	CKSYB106K6R3
C 8312	(A,161,17)	CKSYB106K6R3
C 8313	(A,103,39)	CCSRCH820J50
C 8314	(A,109,39)	CCSRCH820J50
C 8315	(A,100,38)	CCSRCH820J50
C 8316	(A,106,38)	CCSRCH820J50
C 8317	(A,154,40)	CCSRCH820J50
C 8318	(A,161,40)	CCSRCH820J50
C 8319	(B,152,36)	CCSRCH820J50
C 8320	(B,160,36)	CCSRCH820J50
C 8321	(B,99,25)	CKSRYB104K25
C 8322	(B,107,25)	CKSRYB104K25
C 8323	(A,114,33)	CEVW100M16
C 8324	(A,114,38)	CEVW100M16
C 8325	(A,105,22)	CKSRYB104K25
C 8326	(B,160,31)	CKSRYB104K25
C 8327	(A,109,45)	CEVW220M16
C 8328	(A,111,23)	CKSRYB104K25
C 8329	(B,152,32)	CKSRYB104K25
C 8330	(A,115,45)	CEVW220M16
C 8331	(A,146,25)	CEVW100M16
C 8332	(A,146,19)	CEVW100M16
C 8333	(A,157,23)	CKSRYB104K25
C 8334	(A,164,23)	CKSRYB104K25
C 8335	(A,147,37)	CEVW220M16
C 8336	(A,147,31)	CEVW220M16
C 8401	(A,181,136) 10 µF	CCG1171
C 8402	(A,187,123)	CCSRCH180J50
C 8403	(A,173,123)	CCSRCH180J50
C 8404	(A,181,131) 10 µF	CCG1171
C 8405	(A,181,134) 10 µF	CCG1171
C 8406	(A,181,129) 10 µF	CCG1171
C 8407	(A,172,120)	CCSRCH180J50
C 8408	(A,188,120)	CCSRCH180J50
C 8409	(B,174,127)	CKSRYB104K25
C 8410	(A,176,129) 22 µF	CCG1178
C 8411	(B,179,127)	CKSRYB102K50
C 8413	(A,181,125)	CKSRYB104K25
C 8451	(A,43,12)	CCSRCH471J50
C 8452	(A,43,17)	CKSRYB105K10
C 8453	(A,42,17)	CKSRYB105K10
C 8454	(B,41,15)	CKSRYB104K25
C 8455	(A,40,22)	CKSRYB104K25
C 8504	(B,186,111)	CKSRYB332K50
C 8506	(B,186,92)	CKSRYB103K50
C 8507	(B,181,83)	CKSRYB103K50
C 8508	(A,145,78)	CEVW470M10
C 8509	(A,145,69)	CEVW470M10
C 8510	(B,186,56)	CKSRYB103K50
C 8511	(B,186,103)	CKSRYB332K50
C 8512	(B,176,105)	CKSRYB474K10
C 8513	(A,145,59)	CEVW101M10
C 8515	(B,182,52)	CKSRYB104K25
C 8516	(B,172,105)	CCSRCH470J50
C 8517	(B,179,100)	CKSRYB474K10
C 8518	(B,157,96)	CKSRYB474K10
C 8520	(B,161,104)	CCSRCH470J50
C 8521	(B,180,58)	CKSRYB103K50
C 8522	(A,145,87)	CEVW101M10
C 8523	(B,182,55)	CKSRYB105K10
C 8524	(A,146,52)	CEVW220M6R3
C 8525	(B,166,97)	CKSRYB105K10
C 8526	(B,159,52)	CKSRYB103K50
C 8527	(B,169,52)	CKSRYB103K50
C 8529	(B,159,46)	CKSYB475K10
C 8531	(B,164,84)	CKSRYB105K10
C 8532	(B,161,106)	CKSRYB105K10
C 8533	(B,168,96)	CKSRYB103K50
C 8536	(A,131,105)	CEVW101M10
C 8537	(B,121,104)	CKSRYB103K50
C 8538	(B,121,100)	CKSRYB103K50
C 8539	(A,123,94)	CEVW101M16
C 8540	(B,166,103)	CKSQYB475K6R3
C 8541	(B,158,88)	CKSRYB474K10
C 8545	(B,172,96)	CCSRCH470J50
C 8547	(B,163,87)	CCSRCH470J50
C 8601	(A,120,145)	CKSRYB105K10
C 8602	(A,119,145)	CKSRYB105K10
C 8603	(A,120,140)	CKSRYB104K25
C 8651	(A,130,142)	CKSRYB104K25
C 8652	(A,129,140)	CKSYB475K16
C 8653	(A,133,138)	CKSRYB104K25
C 8701	(A,130,50) 10 µF	CCG1171
C 8702	(A,136,50)	CEVW101M16
C 8703	(B,137,50)	CKSRYB103K50
C 8704	(B,133,65)	CKSRYB474K10
C 8705	(A,145,97)	CEVW101M10
C 8706	(B,133,66)	CKSRYB104K25
C 8707	(A,133,58)	CEVW221M10
C 8708	(A,132,65)	CKSQYB105K16
C 8709	(A,163,128)	CEVW100M10
C 8710	(A,149,124)	CEVW101M6R3
C 8712	(A,170,128)	CKSRYB104K25
C 8713	(B,182,142)	CKSQYB106K6R3
C 8714	(A,138,143)	CEVW101M16
C 8715	(A,149,151)	CKSRYB104K25
C 8716	(B,153,158)	CKSRYB103K50
C 8717	(B,160,158)	CKSRYB104K25
C 8719	(B,138,134)	CKSRYB103K50
C 8720	(A,136,129)	CEVW101M10
C 8721	(A,164,120)	CEAT471M16(P35)
C 8722	(A,149,134)	CEVW470M16
C 8723	(B,143,136)	CKSRYB103K50
C 8751	(A,102,46)	CEVW221M4
C 8752	(A,94,46)	CEVW221M4
C 8753	(A,94,31) 47 µF	CCG1181

Circuit Symbol and No.			Part No.
C 8754	(A,88,31)	10 µF	CCG1171
C 8755	(A,90,21)		CKSRYB473K50
C 8756	(B,87,84)		CKSYB475K10
C 8757	(A,86,21)		CEVW100M10
C 8758	(B,87,81)		CKSYB475K10
C 8759	(A,47,50)		CEVW221M4
C 8760	(A,47,40)		CEVW221M4
C 8761	(A,47,31)		CEVW221M4
C 8762	(A,91,31)	47 µF	CCG1181
C 8763	(A,123,39)		CEVW221M4
C 8764	(A,131,39)		CEVW221M4
C 8765	(A,139,39)		CEVW221M4
C 8766	(A,80,63)		CEVW221M4
C 8768	(B,124,22)		CKSRYB104K25
C 8769	(B,143,28)		CCSRCH121J50
C 8770	(A,47,25)		CCSRCH121J50
C 8771	(B,85,23)		CKSRYB105K10
C 8772	(B,87,25)		CKSRYB105K10
C 8801	(B,73,35)		CKSRYB102K50
C 8802	(B,73,38)		CKSRYB102K50
C 8901	(A,69,61)	10 µF	CCG1171
C 8902	(A,68,62)	10 µF	CCG1171
C 8903	(A,65,62)	10 µF	CCG1171
C 8904	(A,63,61)	10 µF	CCG1171
C 8905	(A,61,61)	10 µF	CCG1171
C 8906	(A,59,61)	10 µF	CCG1171
C 8907	(A,75,55)		CKSRYB104K25
C 8908	(A,68,55)		CKSRYB104K25
C 8909	(A,62,55)		CKSRYB104K25
C 8911	(A,72,51)		CKSRYB105K10
C 8913	(B,63,52)		CKSRYB105K10
C 8914	(A,58,51)		CKSRYB105K10
C 8916	(A,55,42)		CEVW470M10
C 8917	(A,65,50)		CKSRYB104K25
C 8918	(A,65,37)		CKSRYB104K25
C 8919	(A,72,44)		CKSRYB104K25
C 8920	(A,68,37)		CKSRYB104K25
C 8921	(A,70,25)	22 µF	CCG1178
C 8922	(A,63,25)	22 µF	CCG1178
C 8923	(A,55,25)	22 µF	CCG1178
C 8924	(A,71,30)		CEVW101M6R3
C 8925	(A,63,30)		CEVW101M6R3
C 8926	(A,55,30)		CEVW101M6R3
C 8928	(B,73,53)		CKSRYB103K50
C 8929	(B,55,47)		CKSRYB103K50
C 8932	(B,58,50)		CKSRYB103K50
C 8933	(B,67,42)		CKSRYB103K50
C 8934	(B,65,42)		CKSRYB103K50
C 8935	(B,59,42)		CKSRYB103K50

D

Unit Number : YWX5004
Unit Name : DVD Core Unit

MISCELLANEOUS

Circuit Symbol and No.			Part No.
IC 1003	(B,72,42)	IC	S-80859CNNB-B9K
IC 1004	(B,75,48)	Regulator IC	NJM2880U1-05
IC 1005	(B,61,58)	IC	S-L2980A50MC-C7J
IC 1007	(B,82,54)	IC	NJM2885DL1-33
IC 1008	(B,80,63)	IC	R1232D121B
IC 1201	(A,26,15)	IC	BD7996EFV
IC 1301	(B,90,27)	IC	TC7SZ125FU
IC 1351	(B,86,27)	IC	TC7SZ08FU
IC 1352	(B,79,13)	IC	TC74LCX16373FT
IC 1401	(B,61,32)	Flash ROM Unit	CWW1434
IC 1402	(B,37,10)	Flash ROM Unit	CWW1435
IC 1403	(B,47,29)	IC	TC7SZ32FU
IC 1481	(B,60,12)	IC	EDS1232AATA-75
IC 1501	(A,60,19)	IC	MN2DS0016AAUB
IC 1801	(A,70,52)	D/A Converter	PCM1753DBQ
IC 1851	(B,7,15)	IC	TC74VHC125FTS1
IC 1852	(B,7,7)	IC	TC74VHC125FTS1
IC 1853	(B,15,4)	IC	TC7SH08FUS1
Q 1101	(B,62,50)	Transistor	2SC4081
Q 1102	(B,68,50)	Transistor	2SC4081
Q 1103	(B,60,45)	Transistor	2SB1260
Q 1104	(B,66,45)	Transistor	2SB1260
Q 1701	(A,52,58)	Transistor	2SA1576A
Q 1702	(A,52,52)	Transistor	2SA1576A
Q 1703	(A,60,58)	Transistor	2SA1576A
Q 1704	(A,60,52)	Transistor	2SA1576A
D 1002	(A,88,66)	Diode	1SR154-400
D 1301	(B,12,10)	Chip LED	CL205IRXTU
L 1004	(B,63,60)	Inductor	CTF1472
L 1005	(B,81,49)	Inductor	CTF1465
L 1006	(B,86,64)	Inductor	CTF1678
L 1007	(B,74,63)	Inductor	CTF1623
L 1101	(B,66,54)	Inductor	CTF1305
L 1482	(B,77,29)	Inductor	CTF1473
L 1502	(A,71,46)	Inductor	CTF1378
L 1503	(A,60,47)	Inductor	CTF1487
L 1504	(A,35,10)	Inductor	CTF1387
L 1511	(A,63,3)	Inductor	CTF1680
L 1601	(A,41,23)	Inductor	CTF1473
L 1602	(A,55,42)	Inductor	CTF1473
L 1603	(A,54,42)	Inductor	CTF1473
L 1604	(A,52,42)	Inductor	CTF1473
L 1605	(A,38,32)	Inductor	CTF1395
L 1671	(A,41,19)	Inductor	CTF1473
L 1672	(A,41,20)	Inductor	CTF1473
L 1673	(A,41,21)	Inductor	CTF1473
L 1701	(A,60,55)	Inductor	CTF1473
L 1801	(A,70,61)	Inductor	CTF1473
L 1851	(B,15,15)	Inductor	CTF1473
L 1852	(B,11,17)	Inductor	CTF1381
L 1853	(B,12,15)	Inductor	CTF1467
L 1854	(B,13,7)	Inductor	CTF1467
L 1855	(B,3,11)	Inductor	CTF1467
L 1856	(B,4,11)	Inductor	CTF1467
L 1901	(A,91,73)	Inductor	CTF1487
L 1902	(A,91,62)	Inductor	CTF1558
X 1501	(A,40,15)	Crystal 27.000 MHz	CSS1714
VR1671	(A,35,20)	Semi-fixed 10 kΩ(B)	CCP1448
EF1501	(A,68,46)	EMI Filter	DTL1106
EF1502	(A,61,44)	EMI Filter	DTL1106
EF1901	(A,87,74)	EMI Filter	DTF1106
EF1903	(A,91,64)	EMI Filter	DTL1106

RESISTORS

Circuit Symbol and No.		Part No.
R 1011	(B,72,40)	RS1/16SS104J
R 1014	(B,82,61)	RS1/16SS473J
R 1015	(B,76,60)	RS1/16SS101J
R 1101	(B,63,52)	RS1/16SS391J
R 1102	(B,62,47)	RS1/16SS511J
R 1103	(B,67,53)	RS1/16SS391J
R 1104	(B,69,47)	RS1/16SS561J
R 1107	(B,61,53)	RS1/16SS6R8J
R 1108	(B,65,53)	RS1/16SS6R8J
R 1109	(B,57,40)	RS1/10S1R5J
R 1110	(B,63,40)	RS1/10S1R5J
R 1111	(B,70,40)	RS1/10S1R5J
R 1112	(B,64,40)	RS1/10S1R5J
R 1113	(B,61,40)	RS1/10S1R5J
R 1114	(B,59,40)	RS1/10S1R5J
R 1115	(B,66,40)	RS1/10S1R5J
R 1116	(B,68,40)	RS1/10S1R5J
R 1117	(B,64,49)	RS1/16SS104J
R 1118	(B,70,49)	RS1/16SS104J
R 1202	(A,19,12)	RS1/16SS221J
R 1203	(A,19,11)	RS1/16SS221J
R 1210	(A,30,27)	RS1/16SS101J
R 1211	(B,26,18)	RS1/16SS3R9J
R 1212	(B,27,18)	RS1/16SS3R9J
R 1214	(B,28,18)	RS1/16SS3R9J
R 1215	(B,29,18)	RS1/16SS3R9J
R 1216	(B,30,18)	RS1/16SS3R9J
R 1217	(B,31,18)	RS1/16SS3R9J
R 1219	(A,20,27)	RS1/16SS101J
R 1223	(A,19,4)	RS1/16SS753J
R 1225	(A,19,7)	RS1/16SS753J
R 1227	(B,13,21)	RS1/16SS3R9J
R 1228	(B,14,21)	RS1/16SS3R9J
R 1229	(B,15,21)	RS1/16SS3R9J
R 1230	(B,16,21)	RS1/16SS3R9J
R 1231	(B,17,21)	RS1/16SS3R9J
R 1232	(B,18,21)	RS1/16SS3R9J
R 1233	(B,19,21)	RS1/16SS3R9J
R 1234	(B,20,21)	RS1/16SS3R9J
R 1240	(B,32,18)	RS1/16SS3R9J
R 1241	(B,33,18)	RS1/16SS3R9J
R 1242	(B,34,18)	RS1/16SS3R9J
R 1243	(B,37,18)	RS1/16SS3R9J
R 1244	(B,36,18)	RS1/16SS3R9J
R 1245	(B,35,18)	RS1/16SS3R9J
R 1301	(B,13,13)	RS1/16SS391J
R 1302	(B,15,13)	RS1/16SS471J
R 1304	(B,87,23)	RS1/16SS563J
R 1305	(B,86,23)	RS1/16SS243J
R 1306	(B,85,23)	RS1/16SS683J
R 1307	(B,88,23)	RS1/16SS243J
R 1314	(B,86,21)	RAB4CQ822J
R 1351	(B,84,25)	RS1/16SS331J
R 1401	(B,72,33)	RS1/16SS221J
R 1402	(B,50,27)	RS1/16SS104J
R 1405	(B,48,10)	RS1/16SS221J
R 1406	(B,25,4)	RS1/16SS104J
R 1407	(B,25,6)	RS1/16SS104J
R 1410	(B,47,31)	RS1/16SS104J
R 1501	(B,71,3)	RAB4CQ560J

Circuit Symbol and No.		Part No.
R 1502	(A,85,3)	RS1/16SS104J
R 1503	(A,71,2)	RS1/16SS560J
R 1504	(A,87,23)	RAB4CQ104J
R 1505	(B,68,3)	RAB4CQ560J
R 1506	(A,87,19)	RAB4CQ104J
R 1507	(B,65,3)	RAB4CQ560J
R 1508	(A,86,16)	RAB4CQ104J
R 1509	(A,86,12)	RAB4CQ104J
R 1510	(A,78,11)	RAB4CQ104J
R 1511	(A,88,4)	RS1/16SS104J
R 1512	(B,59,3)	RAB4CQ560J
R 1513	(A,44,4)	RS1/16SS102J
R 1514	(A,80,7)	RAB4CQ104J
R 1515	(A,43,3)	RS1/16SS102J
R 1516	(A,76,8)	RS1/16SS103J
R 1518	(A,85,5)	RS1/16SS104J
R 1520	(A,35,8)	RS1/16SS221J
R 1521	(A,41,11)	RAB4CQ101J
R 1522	(B,56,3)	RAB4CQ560J
R 1523	(A,39,11)	RS1/16SS101J
R 1524	(A,39,12)	RS1/16SS101J
R 1525	(B,53,3)	RAB4CQ560J
R 1526	(A,36,10)	RS1/16SS270J
R 1528	(A,43,14)	RS1/16SS101J
R 1529	(B,53,22)	RAB4CQ560J
R 1530	(A,43,15)	RS1/16SS105J
R 1531	(B,50,22)	RAB4CQ560J
R 1532	(A,77,22)	RS1/16SS103J
R 1533	(A,76,27)	RS1/16SS103J
R 1534	(A,77,26)	RS1/16SS103J
R 1535	(A,63,36)	RS1/16SS221J
R 1537	(A,67,40)	RS1/16SS221J
R 1538	(A,66,41)	RS1/16SS221J
R 1540	(A,70,43)	RS1/16SS102J
R 1541	(A,64,41)	RS1/16SS472J
R 1542	(A,60,36)	RS1/16SS223J
R 1543	(A,59,37)	RS1/16SS332J
R 1544	(A,57,41)	RS1/16SS183J
R 1545	(A,61,36)	RS1/16SS223J
R 1546	(A,59,42)	RS1/16SS104J
R 1547	(A,59,41)	RS1/16SS473J
R 1548	(A,59,36)	RS1/16SS104J
R 1554	(A,60,39)	RS1/16SS221J
R 1555	(A,57,38)	RS1/16SS221J
R 1556	(A,43,7)	RS1/16SS104J
R 1557	(A,57,39)	RS1/16SS104J
R 1559	(A,63,41)	RS1/16SS221J
R 1560	(A,68,42)	RAB4CQ104J
R 1562	(A,64,38)	RAB4CQ104J
R 1565	(A,73,36)	RS1/16SS103J
R 1566	(A,72,36)	RS1/16SS103J
R 1567	(B,68,22)	RAB4CQ560J
R 1568	(B,65,22)	RAB4CQ560J
R 1569	(B,62,3)	RAB4CQ560J
R 1570	(B,60,22)	RAB4CQ560J
R 1571	(B,57,22)	RAB4CQ560J
R 1573	(B,63,19)	RS1/16SS560J
R 1582	(A,81,25)	RS1/16SS103J
R 1583	(A,81,27)	RS1/16SS103J
R 1584	(A,77,28)	RS1/16SS103J

Circuit Symbol and No.		Part No.
R 1601	(A,41,25)	RS1/16SS123J
R 1602	(A,39,24)	RS1/16SS123J
R 1607	(A,41,27)	RS1/16SS105J
R 1609	(A,37,28)	RN1/16SE1002D
R 1610	(A,43,28)	RS1/16SS222J
R 1613	(A,39,28)	RS1/16SS223J
R 1614	(A,46,35)	RS1/16SS105J
R 1615	(A,43,32)	RS1/16SS105J
R 1616	(A,53,36)	RS1/16SS2002D
R 1672	(A,43,21)	RS1/16SS303J
R 1673	(A,37,22)	RS1/16SS183J
R 1674	(A,34,23)	RS1/16SS562J
R 1701	(A,55,60)	RS1/16SS181J
R 1702	(A,55,59)	RS1/16SS181J
R 1703	(A,55,54)	RS1/16SS181J
R 1704	(A,55,53)	RS1/16SS181J
R 1706	(A,52,56)	RS1/16SS201J
R 1708	(A,52,50)	RS1/16SS201J
R 1709	(A,55,52)	RS1/16SS68R0D
R 1710	(A,55,58)	RS1/16SS68R0D
R 1711	(A,57,51)	RS1/16SS1R5J
R 1712	(A,57,58)	RS1/16SS1R5J
R 1713	(A,62,60)	RS1/16SS181J
R 1714	(A,62,59)	RS1/16SS181J
R 1715	(A,60,56)	RS1/16SS201J
R 1717	(A,62,54)	RS1/16SS181J
R 1718	(A,62,53)	RS1/16SS181J
R 1719	(A,60,50)	RS1/16SS201J
R 1721	(A,62,58)	RS1/16SS68R0D
R 1722	(A,62,52)	RS1/16SS68R0D
R 1723	(A,64,58)	RS1/16SS1R5J
R 1724	(A,64,51)	RS1/16SS1R5J
R 1803	(A,72,56)	RS1/16SS821J
R 1804	(A,74,56)	RS1/16SS821J
R 1805	(A,72,61)	RS1/16SS104J
R 1806	(A,74,61)	RS1/16SS104J
R 1860	(B,2,6)	RS1/16SS560J
R 1863	(B,17,7)	RS1/16SS104J
R 1864	(B,15,7)	RS1/16SS104J
R 1866	(A,38,11)	RS1/16SS0R0J
R 1867	(B,10,11)	RS1/16SS0R0J
R 1868	(A,38,12)	RS1/16SS0R0J
R 1869	(B,10,3)	RS1/16SS104J
R 1870	(B,17,6)	RS1/16SS221J
R 1903	(A,89,52)	RS1/16SS0R0J
R 1904	(A,90,59)	RS1/16S0R0J

CAPACITORS

Circuit Symbol and No.			Part No.
C 1019	(B,58,59)		CCSSCH101J50
C 1020	(B,58,57)		CKSSYB104K10
C 1021	(B,60,60)		CKSRYB105K10
C 1022	(B,79,47)		CKSSYB103K16
C 1023	(B,79,49)		CKSSYB104K10
C 1024	(B,71,48)		CKSQYB475K10
C 1025	(B,64,58)		CKSRYB105K10
C 1026	(B,12,19)		CKSSYB104K10
C 1027	(A,90,53)		CCSSCH101J50
C 1028	(B,89,56)		CKSRYB105K10
C 1029	(B,89,52)		CKSQYB225K10
C 1030	(B,84,59)		CKSQYB106K6R3
C 1031	(B,85,59)		CKSQYB106K6R3
C 1032	(B,82,59)		CKSRYB105K10
C 1033	(B,73,59)		CKSQYB106K6R3
C 1034	(B,73,57)		CKSQYB106K6R3
C 1035	(B,45,27)		CCSSCH101J50
C 1101	(B,61,54)	10 µF	CCG1192
C 1102	(B,58,50)	100 µF	CCG1232
C 1103	(B,65,50)	100 µF	CCG1232
C 1104	(B,63,43)		CKSSYB104K10
C 1105	(B,70,43)		CKSSYB104K10
C 1106	(B,63,45)		CKSSYB103K16
C 1107	(B,70,45)		CKSSYB103K16
C 1108	(A,35,36)		CKSSYB103K16
C 1109	(A,36,33)		CKSRYB105K10
C 1110	(A,35,37)		CKSSYB103K16
C 1111	(A,39,33)		CKSRYB105K10
C 1201	(B,21,11)		CEVW101M16
C 1202	(B,15,17)		CKSYB475K16
C 1207	(B,16,10)		CKSQYB225K10
C 1209	(A,32,17)		CKSSYB104K10
C 1210	(A,32,19)		CKSSYB471K50
C 1211	(A,19,16)		CKSSYB103K16
C 1212	(A,19,8)		CKSSYB104K10
C 1213	(A,19,9)		CKSSYB104K10
C 1301	(B,90,25)		CKSSYB104K10
C 1302	(B,88,25)		CKSSYB104K10
C 1351	(B,86,25)		CKSSYB104K10
C 1352	(B,75,19)		CKSSYB104K10
C 1353	(B,81,19)		CKSSYB104K10
C 1354	(B,74,7)		CKSSYB104K10
C 1355	(B,85,8)		CKSSYB104K10
C 1356	(B,83,28)		CKSYB106K6R3
C 1401	(B,72,31)		CKSSYB103K16
C 1402	(B,49,33)		CKSSYB104K10
C 1403	(B,81,27)		CKSQYB475K6R3
C 1405	(B,48,8)		CKSSYB103K16
C 1406	(B,25,15)		CKSSYB104K10
C 1407	(B,74,27)		CKSQYB475K6R3
C 1408	(B,47,27)		CKSSYB104K10
C 1481	(B,72,5)		CKSSYB104K10
C 1482	(B,72,7)		CKSSYB104K10
C 1483	(B,67,5)		CKSSYB104K10
C 1484	(B,63,5)		CKSSYB104K10
C 1485	(B,56,5)		CKSSYB104K10
C 1486	(B,53,5)		CKSSYB104K10
C 1487	(B,51,5)		CKSSYB104K10
C 1488	(B,49,5)		CKSSYB104K10
C 1490	(B,68,19)		CKSSYB104K10
C 1491	(B,77,27)		CKSQYB106K6R3
C 1492	(B,55,19)		CKSSYB104K10
C 1493	(B,52,19)		CKSSYB104K10
C 1494	(B,65,19)		CKSSYB104K10
C 1496	(B,65,5)		CKSSYB102K50
C 1497	(B,61,19)		CKSSYB102K50
C 1498	(B,77,26)		CKSSYB102K50
C 1499	(B,49,4)		CKSSYB102K50
C 1501	(A,68,44)		CKSQYB106K6R3
C 1502	(A,58,43)		CKSQYB106K6R3
C 1503	(A,55,3)		CKSSYB104K10

Circuit Symbol and No.		Part No.
C 1504	(A,58,3)	CKSSYB104K10
C 1505	(A,53,3)	CKSSYB104K10
C 1506	(A,60,3)	CKSSYB104K10
C 1507	(A,68,2)	CKSSYB104K10
C 1508	(A,65,3)	CKSSYB104K10
C 1509	(A,69,2)	CKSSYB104K10
C 1510	(A,43,11)	CKSSYB104K10
C 1511	(A,76,7)	CKSSYB104K10
C 1512	(A,76,11)	CKSSYB104K10
C 1513	(A,43,10)	CKSSYB104K10
C 1514	(A,76,17)	CKSSYB104K10
C 1515	(A,43,16)	CKSSYB104K10
C 1516	(A,76,15)	CKSSYB104K10
C 1517	(A,43,17)	CKSSYB104K10
C 1518	(A,37,14)	CCSSCH8R0D50
C 1519	(A,37,16)	CCSSCH8R0D50
C 1521	(A,76,24)	CKSSYB104K10
C 1522	(A,77,24)	CKSSYB104K10
C 1523	(A,58,36)	CKSSYB104K10
C 1524	(A,57,37)	CKSSYB103K16
C 1525	(A,66,36)	CKSSYB104K10
C 1526	(A,62,40)	CKSSYB103K16
C 1527	(A,63,35)	CKSSYB471K50
C 1528	(A,65,36)	CKSSYB104K10
C 1529	(A,60,38)	CKSSYB103K16
C 1530	(A,59,39)	CKSSYB224K6R3
C 1531	(A,57,42)	CKSSYB123K16
C 1536	(A,76,20)	CKSSYB104K10
C 1537	(A,55,43)	CKSSYB102K50
C 1538	(A,53,43)	CKSSYB102K50
C 1539	(A,57,36)	CKSSYB104K10
C 1540	(A,61,38)	CKSSYB103K16
C 1560	(A,51,3)	CKSSYB104K10
C 1577	(A,77,30)	CKSSYB104K10
C 1601	(A,41,24)	CCSSCH101J50
C 1602	(A,43,24)	CCSSCH101J50
C 1603	(A,37,23)	CCSSCH680J50
C 1604	(A,39,25)	CCSSCH680J50
C 1608	(A,41,26)	CKSSYB103K16
C 1609	(A,43,26)	CKSSYB103K16
C 1610	(A,53,39)	CCSSCH101J50
C 1611	(A,53,37)	CKSSYB562K25
C 1612	(A,55,36)	CKSSYB224K6R3
C 1613	(A,55,37)	CKSSYB224K6R3
C 1614	(A,56,37)	CKSSYB333K16
C 1615	(A,41,30)	CKSRYB105K10
C 1616	(A,48,36)	CKSSYB104K10
C 1617	(A,49,38)	CKSSYB104K10
C 1618	(A,51,38)	CKSSYB104K10
C 1619	(A,51,36)	CKSSYB104K10
C 1620	(A,50,36)	CKSSYB104K10
C 1621	(A,50,38)	CKSSYB104K10
C 1622	(A,52,38)	CKSSYB104K10
C 1623	(A,52,39)	CKSSYB104K10
C 1624	(A,43,27)	CKSSYB103K16
C 1625	(A,56,36)	CKSSYB104K10
C 1626	(A,41,31)	CKSRYB105K10
C 1627	(A,43,23)	CKSSYB104K10
C 1628	(A,54,36)	CKSSYB104K10
C 1629	(A,49,36)	CKSSYB104K10

Circuit Symbol and No.			Part No.
C 1630	(A,38,30)		CKSQYB106K6R3
C 1671	(A,43,18)		CKSSYB104K10
C 1672	(A,43,19)		CKSSYB104K10
C 1673	(A,37,21)		CKSSYB104K10
C 1674	(A,39,21)		CKSSYB104K10
C 1675	(A,39,19)		CKSRYB105K10
C 1676	(A,37,19)		CKSRYB105K10
C 1677	(A,43,22)		CKSSYB104K10
C 1701	(A,52,60)		CKSSYB104K10
C 1702	(A,53,54)		CKSSYB104K10
C 1703	(A,60,60)		CKSSYB104K10
C 1704	(A,60,54)		CKSSYB104K10
C 1705	(A,55,56)		CKSQYB225K10
C 1801	(A,74,52)		CKSSYB104K10
C 1802	(A,67,58)	10 µF	CCG1192
C 1803	(A,67,56)		CKSSYB104K10
C 1804	(A,69,58)	10 µF	CCG1192
C 1805	(A,69,56)		CKSSYB104K10
C 1808	(A,72,57)		CCSRCH182J50
C 1809	(A,75,57)		CCSRCH182J50
C 1810	(A,72,59)		CKSQYB475K6R3
C 1811	(A,74,59)		CKSQYB475K6R3
C 1851	(B,7,19)		CKSSYB104K10
C 1852	(B,7,10)		CKSSYB104K10
C 1853	(B,15,6)		CKSSYB104K10
C 1901	(A,84,74)		CKSSYB102K50

E

Unit Number : CWX3154
Unit Name : Compound Unit(A)

Q 1299	Photo-taransistor	CPT231SCTD
S 1201	Spring Switch(12cm)	CSN1069
S 1202	Spring Switch(8cm)	CSN1069
S 1203	Spring Switch(DISC SENS)	CSN1069
S 1204	Spring Switch(DISC SENS)	CSN1070
S 1205	Spring Switch(8cm)	CSN1070
R 1298		RS1/16S0R0J
R 1299		RS1/16S0R0J

F

Unit Number : CWX3394
Unit Name : Compound Unit(B)

S 1206	Switch(CLAMP)	CSN1067

Miscellaneous Parts List

	Pickup Unit(Service)	CXX2118
M 1	Motor Unit(LOADING)	CXC4912
M 2	Motor(STEPPING)	CXM1364
M 3	Motor(SPINDLE)	CXM1362